

DEV INDAR LALL

Changing Concepts
in
Education

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CHANGING CONCEPTS IN EDUCATION

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Punjab Kitab Ghar (Regd.)

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PREFACE

It has been said that reading makes a full man, conference a ready man and writing an exact man. In the discharge of my duties relating to teacher education, I had to read on education and also lecture on it. But these aspects of work did not make my thinking exact. As a natural sequel to these pursuits, I started writing on education and the present book, it must be admitted, is an outgrowth of this hobby.

The title of the book describes its scope and is indicative of the fact that the concepts of education are changing. These changes have been necessitated by two forces, the scientific advances in the domains of production and communication ; and the vast changes in the socio-politico-cultural pattern of society. As a result of these changes, the problems that the educators have to face today are not as to who should attend school and how long he should stay there. These questions have been answered by the directive principle of the Constitution which lays down that within a period of ten years from the commencement of the Constitution free and compulsory education shall be provided for all children till they are 14 years of age.

The acceptance of this principle implies that numbers in our educational institutions will increase and increase rapidly. Provision will have to be made for the increasing numbers but providing for numbers alone is not enough. The real problems that the educators have to face are in regard to the degree of excellence that will be attained in our institutions and the extent to which equality of opportunity will exist therein.

The solution of these problems calls for a change, a drastic change, in the concept and practice of education. A New Order in education is, in fact, a crying need of the hour. But more than anything else it calls for a change in the attitude of parents, supervisors and administrators so that they see the change in its proper perspective and appreciate it.

This book, therefore, has been so planned as to trace the evolution of the most significant features of modern educational thought and practice and present them to the reader in a clear and concise form. It is intended not only for the pre-and in-service teachers but also for those who have anything to do with education and are interested in its problems. If it promotes fresh thought in the minds of its readers and stimulates them to a reconsideration of the problems of education, its purpose will be served.

Special acknowledgment and thanks are due to Principal V. S. Mathur and Prof. K. K. Verma, my former colleagues, for valuable suggestions and helpful criticism of some of the problems discussed in the book. Thanks are also due to the managements of the Shiksha and the Punjab Educational Journal for permission to reproduce the articles written by me and published in the columns of these journals.

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D. I. Lall

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EDUCATION

Chapter I

Values

IN the world-famous story of Alice in Wonderland, the heroine at one place asked the Cheshire cat, "Would you tell me please which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the cat meaningfully.

"I don't much care where.....," said Alice.

"Then it doesn't matter which way you go," said the cat.

The question that the heroine of Alice in Wonderland asked the Cheshire cat is not only to be asked but also to be answered by every teacher and this has to be done not once in life or even once in a year but has to be answered practically everyday and perhaps many times a day. The work of a teacher, no doubt, depends more upon the philosophy that he adopts and the aim that he has in view than that of the members of any other profession. This is so because a teacher has to deal not with dead material but with material that is living and constantly changing. He has not to mould the material at his disposal into patterns involving uniform routine practices but has to establish personal relationships with children and meet their needs for a cultural *dynamic*. Human nature is extremely complex and that is why it is impossible to learn some recipes once for all and imagine that it will solve all problems of teaching for all times. This is so because a teacher cannot stick to the beaten path for long. Everyday presents new problems, brings in different

personalities and gives rise to varied situations. It is, therefore, evident that a teacher who regards himself as a mere cog in a machine without playing any part in determining its policies or programmes, methods or techniques, content or resources is not worth the salt.

What has been said above is important but does not exhaust the *raison d'être* of formulating our values in education. There are other reasons also and the most important of these reasons is that the "why" of education governs the "how" of it. In other words, the aim will govern not only the methods to be employed but also the techniques to be adopted. If the purpose of schools, for example, is to prepare individuals for a democratic society, it will have to adopt one set of means and develop in the people a critical attitude towards life and its problems; but in case the purpose is to prepare individuals for a life in an autocracy, the set of means will have to be changed beyond recognition and emphasis will be laid on unquestioned obedience, abject subservience and absolute allegiance.

The purpose of education, moreover, does not determine the methods and the techniques of teaching only, it also determines the content of the curriculum, the kind of school and the period of schooling for children and adults. In certain cases it goes still further and puts its impression on the equipment required, the dimensions of the class-rooms and the size of the playgrounds needed for the purpose. If the aim, for example, is to enable the children to earn their livelihood only, emphasis on bread and butter studies should suffice. But

if it is to develop the individuality of the child, the programme of activity will have to be much more broadbased, comprehensive and varied.

Still another factor which makes the consideration of values essential emerges from the recent researches which are being carried on in the field of education. The application of the techniques of science to the problems of the school has led to rapid strides in discovering some fundamental laws of human nature. These methods, for example, have brought to the fore the vast amount of differences which exist between individuals—physical, intellectual, emotional and volitional. The extent of these differences can be gauged from the fact that from amongst the hundreds of millions of people inhabiting this world, we cannot pick up two individuals who are exactly alike. Even those who resemble most will be different in most of the fundamental characteristics of human behaviour. But the issue of variability in human nature does not end merely with a discovery of such an important fact by the scientists. It poses three alternatives and they are first, should the individual differences be ignored; secondly, should they be neutralised; and finally, should they be accentuated. The answer to these questions cannot be given by the scientist; it is the proud privilege and special domain of the philosopher to ponder over these alternatives and then decide which course to adopt. Unless the philosopher comes on the scene and pronounces his judgment, even the most important contribution of scientific research would be useless, unavailing and inoperative.

Discoveries of this type and findings of other researches have wielded a great influence on the process of education. But their real implications can be properly understood and appreciated only in the light of the aims and values of education. In the absence of these guide-posts even important principles would come to nothing and the time spent on them would be tantamount to pouring water into a sieve.

It would, moreover, be wrong to presume that the 'why' if it has once been determined, will remain constant for all times and for all places. There cannot be anything more dangerous and harmful than this presumption. Any change in the life of the people of a country or for that purpose in the socio-politico-cultural pattern of society must necessarily mean a change in the purpose or purposes of education. The history of education bears significant testimonies to prove this dynamism of life and thought of a people. The way in which education was viewed by our countrymen before the 15th of August, 1947, for example, cannot be reconciled with the changed conditions and circumstances. The attainment of independence and the advent of the democratic form of Government have revolutionised our concept of education and the purposes that it should fulfil. This revolution in the form of ideas and ideology will not remain static; if it does, it will degenerate education into a fixed routine and convert the people into soulless automatons. The dynamism in thought, on the other hand, will constantly demand a re-evaluation and a re-interpretation of values.

Another instance of the changing role of institutions in society would be useful. There was a time when the influence of the family and the church was supreme in the educational sphere. But now-a-days it has no such strings attached to it. Our era has also seen a lot of scientific and technological development. Industrialisation has brought us more and more towards urbanisation. As a result of this and certain other influences the Indian Joint Family System appears to have outlived its utility and is on its last legs. Individual freedom and development are now being universally applied. Such and other manifestations of change put a great responsibility on education and educators. Education is, now, not the monopoly of the selected few, it is the birthright of every individual and every State must hold itself responsible for this.

Finally, we have to remind our readers that the present age is an age of internationalism. The barriers of time and distance have been completely annihilated and things have come to such a pass that events in one country are bound to have their effect and repercussions in other parts of the world. As the artificial barriers between nations are vanishing, the desire among nations to have greater collaboration with one another is increasing. This is not an outcome of the attempts to maintain international harmony through balance of power but through a new approach—the approach of the U.N.O. in general and that of the UNESCO in particular. These agencies are doing a lot in providing a healthy atmosphere between the educational institutions of different countries

through exchange of students and teachers, scholarships and study grants, seminars and conferences.

The determination of aims or values is, therefore, extremely important. The question that now arises is how to determine these values. There are two approaches available for this purpose—the philosophical approach and the scientific approach. In the primitive ages there was not much awareness of the aim of education as such. With the passage of time, however, there grew some consciousness about these aims and they were mentioned in the literatures of the advanced countries and those of the more civilized people. For hundreds of years the pursuit of determining values was regarded as a function of philosophers and other master minds and this field of enquiry was considered to be the province of philosophy only.

Some of the nineteenth century scientists, however, were not satisfied with the statement of aims propounded by philosophers and others. They regarded them as extremely hypothetical in view of the fact that they were based on mere speculation. With a view to meeting these shortcomings and adding to its reliability and objectivity, they applied their minds to the problem and made an attempt to tackle it on scientific lines. Some of them got a consensus of the opinions of experts on this matter. Others made a job analysis of the activities of life and deduced the aims from this analysis. There were still others who made statistical counts of the items which occurred most frequently in life and regarded them as tantamount to the aims of education.

The sociologists who made an attempt to define the aims of education by resorting to one or more of the above techniques came to enumerate hundreds of specific aims. Thorndike, the famous psychologist, however, thought that educational aims were a projection of human desires. On the basis of this assumption he declared that "the aims of education should be to make men want the right things, and to make them better able so to control all the forces of nature and themselves that they can satisfy these wants." He made an earnest attempt to break down the right thing in great detail and came to the conclusion that in all likelihood their number would run into millions.

But these techniques, it should be noted, will not lead us very far. Methods like these, as Bode has pointed out, could determine admirably what the pupils and adults desired but were silent on what they ought to desire. In other words, the scientific methods can serve the purpose of determining the socio-educational *status-quo* only; they cannot give us any insight whatever as to whether that *status-quo* should be maintained or perpetuated, discarded or altered. In fact such techniques have no means whatever of evaluating the standing or the *status-quo* of the *status-quo* and this failing by itself is enough for the rejection of these scientific techniques.

The results of science, it must be admitted, are more reliable, objective and valid than those of philosophy and hence more dependable. This naturally results in there being a greater amount of agreement amongst scientists than amongst philosophers. But it should be noted that scientific experiments

deal with controlled situations whereas philosophy is all-inclusive and includes un-controlled variables also in its purview. Moreover the scientist successfully excludes the personal bias whereas the philosopher recognises it and gives it its due place. As a result of this, it might be safely affirmed that even though the findings of philosophy may lack in accuracy, they certainly score higher in respect of adequacy and comprehensiveness.

It was stated above that there were two techniques open to us for determining values in education—the recent scientific technique and the time-honoured philosophical technique. Of these two techniques we have rejected the scientific technique as being inadequate to meet our requirements. The only technique, therefore, open to us is to enquire into the problem of aims with the help of philosophy—the thinking study of man.

The literal meaning of the word “philosophy” is “love of wisdom,” but in common parlance it is an attempt to understand all that comes within the range of human experience. In the words of Alfred Weber, it is a “search for a comprehensive view of nature, an attempt at a universal explanation of the nature of things.” It has also been defined as the way in which one regards things, events and relationships and the values that one sets on them. This valuation may differ from individual to individual and from group to group. Huxley has rightly said, “Men live in accordance with their philosophy of life and their conceptions of the world. It is true of the most thoughtless. It is impossible to live without metaphysics.” But it must be realised in the very beginning that philosophy is

mostly an idea of what is possible, not a record of accomplished facts. Hence it is hypothetical and merely represents the credibility and feasibility of something to be true. It has also to be appreciated that a philosophy results in a certain way of life and indicates a manner of life which an individual or a group may adopt or like to adopt.

If we take into consideration the subtle shades of difference between the different philosophies, we will find their number to be quite large. But if we ignore these differences and make an attempt to group them broadly, we find that they can be grouped into three main and typical divisions. These broad divisions of thought are Realism, Idealism and Pragmatism. Let us now consider the fundamental characteristics of each one of them and then discover their implications in respect of educational values.

The first group of philosophers is known as Realists. They believe in the reality of the physical world--the world of things, plants and the vast universe of the astronomers. They also experience their own needs, wants and feelings and regard them as true and real but in order of precedence they are only secondary, the first and foremost in this respect being the experiences of the physical world. The Realists do not profess to have created this world or consider themselves to be in a position to control or master it but regard it as independent of human knowledge. They also believe that it has its own nature and is governed by its own laws. They also have their faith in the thesis that human beings, whether they will or not, have to submit themselves to the laws of the physical world

and the mundane reality of its everyday life. Their criterion of finding out whether a thing, action or process is true is to put it into practice and see if it works. If it does, it is true ; otherwise not. The Realists, it should be noted, are also known as materialists, positivists or believers in naturalism.

Realism, as we have stated above, regards the physical world as of supreme importance and the world of self as subordinate to it and consequently of secondary importance only. But Idealists, which are sometimes known as Transcendentalists also, are opposed to this point of view. They give the first place of importance to man and his feelings and give only secondary place to the physical world. True reality, according to them, is mental and not physical. It transcends the physical environment and goes beyond it to the world of mind. Mind, moreover, is not to be confused with the brain and its working but it is something beyond it. Idealists thus regard man as the measure of all things and have firm faith in the belief that the ultimate reality exists in man's mind and not in the physical world.

Idealism regards the physical universe as an incomplete expression of reality and postulates the existence of a universal mind to perceive it without which it has no existence. It also regards the mind of each individual as being in constant and ever-lasting touch with the eternal and in this way deprecates the contribution of biological sciences to the study of man as compared to the contribution of logic and religion, psychology and aesthetics. The protagonists of this school of thought reject outright the mechanistic conception of life or behaviour and

postulate the belief that there is a kind of inner harmony between the mind of the man and that of the universe.

The third school of philosophy is Pragmatism. It is comparatively young in age and is typically American in its attitude to life and to education.

The word pragmatism is derived from the Greek word *pragma* which means "a thing done, business, effective action." This term was used for the first time by Aristotle in distinguishing the life of action from the life of contemplation and it is this use of the term which made William James, a foremost exponent of this theory, sub-title his transcript of lectures on pragmatism as "a new name for old ways of thinking." Its other exponents are Kilpatrick, Dewey and Charles Pierce—all belonging in a sense to the twentieth century. Pragmatism, therefore, may be said to have a short history but it certainly has its roots laid deep in the hoary past.

Pragmatists do not believe in any speculative theories but are wedded to the scientific method of studying the facts of experience. They are opposed to the formulation of any such theory as transcends the obvious realities of human life because for them there is no objective reality to be known. They deny the existence of any fixed and eternal values and put their faith in the dogma that man creates his own values in the course of activity and that reality is never complete but always in the making. They assert that in view of the changing reality, the question of there being any absolute truth does not arise. They also stress the fact that truth is nothing but a matter of consequences only. They assert that it depends

upon man and also upon the circumstances in which he is placed. If circumstances change, the nature of truth may also change. As such what is true for A may not be true for B and what is true for B may not be true for C. Similarly what was true yesterday may not be true to-day and what is true to-day may not be true tomorrow. It would be useful here to quote from William James. He says¹ :—

“Truth happens to an idea. It becomes true, is made true by events. Its verity is in fact an event, a process : the process namely of its verifying itself. Its verification, its validity is the process of its validation.

“Truth for us is simply a collective name for verification process, just as health, wealth, strength, etc., are names for other processes connected with life, and also pursued because it pays to pursue them. Truth is *made* just as health, wealth, and strength are made, in the course of experience.

“The true, to put it very briefly, is only the expedient in the way of our thinking, just as the right is only the expedient in the way of our behaving.

“The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite, assignable reasons.”

In the above paragraphs we have discussed, in very brief outline, the salient features of the three philosophies—Realism, Idealism and Pragmatism. Those who owe allegiance

1. James, William, *Pragmatism*, P. 200.

to any one of these types are bound to look at education in the perspective of that philosophy and it is, therefore, not the least surprising that the solutions that the followers of the upholders of these philosophies propose or the answers that they give to the many problems arising out of educational theory and practice are characteristically different from each other. The extent of these differences may be gauged from the fact that they sometimes lead to contradictory approaches. But there is no denying the fact that each one of these philosophies has a significant part to play and an important contribution to make to the science and art of education and this contribution we now proceed to consider briefly.

Realism, as we have stated elsewhere, accepts the existence of a real world of things corresponding to our experiences and objects of perception. The exponents of this school of thought, therefore, pin their faith in making education more realistic by assigning greater importance to concrete activities and emphasising learning through senses. It is deadly against making education abstruse and deprecates bookishness and verbalism. It advocates wide travels with a view to acquiring first-hand real experiences of countries and their people and enjoins upon educators to give the concrete and practical aspects of life a more important and central place in the programme of learning. In this way they suggest the replacement of literary and linguistic studies by scientific studies and thus develop, in the words of Thomas Henry Huxley, "a complete and thorough scientific culture." An extreme realist would even go to the extent of deprecating

the value of books altogether and adopting the slogan, "things and not words," as its battle-cry.

It is certainly true that the extreme position of a realist is neither tenable nor acceptable but it certainly serves as a perpetual reminder and warning to the teacher against too much verbalism and bookishness. Realism also demands that education should be utilitarian in the sense of preparing the individuals for a future career.

Idealism rejects the plausibility of the physical world as the ultimate reality and extols the world of experience. It regards that reality as spiritual rather than as material—it is the world of ideas which idealists love and not the world of facts. In view of this the idealists attach more importance to the study of humanities than to the study of sciences. It also emphasises the need of enabling each individual to achieve the highest perfection that it is capable of. Herman Harrell Horne says, "In the light of the total philosophy of idealism, we conclude that the objective of living and learning is to develop the natural man into the ideal man." Thus the aim of education according to the idealists is self-realisation—the realisation of the highest potentialities of the self. In this way it discards the notion of reserving education for the chosen few and postulates universal education—education for everybody without exception.

To sum up the position in regard to Idealism, it might be remarked, that it is both handy and serviceable in elucidating the aim and content of education ; but when it comes to the methods, its contribution is rather insignificant.

Pragmatists, as we have mentioned earlier, do not believe in any set of universal or spiritual values. They regard man as the real measure for creating values and this is done by conducting experiments and solving problems. In view of this, Pragmatism fails to provide or equip us with any fixed or ready-made aims or purposes of education because they are under continuous revision as one advances into the future. If there is any general aim for Pragmatists, it is only that of growth—growth leading to further growth.

As the child, according to the Pragmatists, is a potential creator of values, he automatically dethrones the teacher from the position of eminence and occupies the central place itself in the process of education. The main burden of a teacher, therefore, is not to instruct or teach but to help the child to learn by providing suitable experiences. In these experiences the child does not remain a passive listener but becomes an active participant. His needs, desires, purposes, impulses, interests and abilities become paramount and dictate the tune.

The contribution of Pragmatism to the methodology of education is indeed crucial. It stresses investigation and experimentation by acting on the environment and trying out ideas on things. Knowledge, moreover, is not to be acquired for its own sake or as an end in itself, but it is to be considered only as an instrument and should be acquired incidentally in the process of solving some problems, pursuing an activity or meeting a particular situation. The problems, activities or situations, moreover, are not to be imposed on the pupil by

the teacher but they must arise out of the pupil himself. "Learning by doing" or even "learning by living" are the watchwords of the method.

This school of thought also abhors the traditional division of the curriculum into watertight compartments because teaching and learning instead of being presentation and memorisation of dead matter have to be both in the form of an adventure. The Project Method, it may be mentioned in passing, is a direct fruit of the pragmatic thought. According to this method, the problem comes first and has to be solved. Whatever learning is imbibed comes as a result of solving the problem and is just incidental to it. Logical arrangement of the subject matter into different compartments is done away with. In fact no curriculum, according to the Pragmatists, can be drawn up in advance—it has to develop in action. It grows on the spot out of the activity in hand or the problem under investigation and the ready-to-wear aspect of the curriculum is rejected outright. In short, the pragmatic approach values activity over passive repetition, investigation over mere instruction, learning over teaching, freedom over external discipline, interest over boredom and self-expression over imposition from above.

We have discussed in the above pages, in very brief outlines of course, the fundamental bases of the three types of philosophy—Realism, Idealism and Pragmatism. Realism insists on facts and avoids sentimentalism and imaginary and unreal situations. But the world, we have to remind our readers, is not merely a natural phenomenon. It is some-

thing more. In many a sphere of human activity we come across ideas and ideals which cannot be regarded as merely physical reactions to physical stimulations. Idealism, on the other hand, makes us live in a world of ideas instead of a world of facts and enables us to apprehend the whole instead of apprehending a part here and a part there. But the knowledge that an Idealist acquires and projects is indirect and is nothing short of a self-projection of mind. Because of this the Idealist cannot go beyond his own shadow and falls an easy prey to what has been called the "egocentric predicament." Pragmatism, in its own turn, has strong objections against transcendental ideals because it regards them as nothing but a "figment of imagination." The position of there being any such thing as the Truth or the Reality is not tenable to him. But it is rather strange that the Pragmatists themselves not only expect but also insist that their position be accepted as true and real. What a paradox of paradoxes !

It is evident from the above that we cannot wholly subscribe to any one school of philosophy—Realism, Idealism or Pragmatism. At one time, even amongst philosophers, Idealism was most popular. But at a later stage horses were changed and a majority of philosophers began to regard Idealism as a dream—a wasteful dream. As a result of this, Realism to start with and Pragmatism at a later stage, began to occupy the pride of the place amongst philosophers. We as educators, however, should not be interested in any philosophy as such but should be guided by its contribution to the theory and practice of education. Evidently the two

schools of thought, Realism and Pragmatism, fail to give us any lofty aims of life or of education but their contributions in the field of educational practice are most outstanding. In this sphere the contribution of Idealism is almost nil. In respect of aims, however, the contribution of Idealism is really superb. We may thus sum up our position by saying that in regard to the theory of education Idealism is fundamental whereas Realism and Pragmatism are contributory; in regard to educational practice, however, the originally contributory factors come to the front and lead the way whereas Idealism is relegated to the background and becomes unimportant and insignificant.

When we begin to consider the aims of education as they have been propounded by different philosophers and educationists we find ourselves at sea again. A wide divergence of views about the aims is discoverable down the ages. Aristotle, for example, defined the aim of education as the "creation of a sound mind in a sound body." Pestalozzi termed it as "a natural, harmonious and progressive development of man's innate powers." Whereas Plato details for us the education of the philosopher, Quintilian substitutes therefor the orator. According to Herbart "the term virtue expresses the whole purpose of Education," whereas Froebel described it as "making the inner outer." Edward Thring described it as the "transmission of life by the living to the living," whereas another educationist has said that "not knowledge, not even more intelligence but more abundant life—that is the first aim of education." Other educationists have stated the aim to be

"complete living," "greater glory of God," "the formation of character," "the harmonious development of the individual," "widening the range of intercourse," "inculcating right habits," "training for citizenship," "preparing for a vocation," "worthy home membership," "training for leisure" and so on. Latest definitions in this connection have been provided by John Dewey, the American philosopher-cum-educationist and Mahatma Gandhi the father of the Indian Nation. While the latter thought education to be the "drawing out the best in child and man, body, mind and spirit," Dewey thought it to be "development of all those capacities in the individual which will enable him to control his environment and fulfil his possibilities." The number of the aims of education advocated by different educationists does not end with what has been written above but could be continued *ad infinitum*.

These definitions are attempts to formulate a universal aim of education but when we examine them carefully we find that they are a delight to the sophist and a despair to the thinker. There are two reasons for this. In the first instance, their number is not determinable. Secondly, it is not easy to interpret them properly and thus understand their proper meaning and significance. Even if we do not take into consideration, the vast number of the aims put forward from time to time the variations discoverable in interpreting them are too profound and deep-seated to be ignored. In the words of Sir Percy Nunn ".....the success of these attempts to state a universal aim for education is largely illusory, being due chiefly to the fact that every one may, within wide limits, interpret them

just as he pleases. For A's idea of a fine character turns out to be either ridiculous or rankly offensive to B; what C regards as complete living would be a spiritual death for D, while the *mens sana in corpore sano* that E reveres, F loathes as the soul of a prig housed in the body of a barbarian."¹

When we initiated the inquiry into the aims and values of education we knew it full well that the philosophical incursions would not lead us to a complete unanimity in the answers. Educational aims, we have to remind our readers, are correlatives to ideals of life and as ideals of life are eternally at variance, their incompatibility and conflict are reflected in educational theories in general and their aims in particular. The philosopher, it must be admitted, does make an earnest attempt to be exacting in his logic with a view to arriving at results acceptable to others, but in spite of these attempts no philosopher has till to-day arrived at such conclusions as are acceptable to all—perhaps not even to many. Whatever unanimity in thought, argument and results is visible, if it is at all there, exists amongst the adherents of the same school of thought. Leaving aside this extent of unanimity, the disagreements and the differences between different schools of thought or types of philosophy are notoriously colossal.

Commenting on the universality of aim in education John Dewey observes as follows :—

“Education, as such, has no aims ; education is an

1. Nunn, T P., *Education, its Data and First Principles*, Edward Arnold & Co, London, 1943, p. 1.

abstract idea. Only persons have aims. And the aims of persons are indefinitely varied, differing with different children, changing as children and their teachers grow. Stated aims, such as we are about to make, will do more harm than good unless they are taken only as suggestions as to how to look ahead for consequences, to observe conditions, and to choose means in the liberating and directing of children's energies. As a recent writer has correctly said, "To lead this boy to read Scott's novels instead of old Sleuth's stories; to teach this girl to sew; to root out the habit of bullying from John's make up; to prepare this class to study medicine—these are samples of the millions of aims we have actually before us in the concrete work of education.

"Bearing this qualification in mind, there are three characteristics found in all good educational aims, viz., (i) they are founded on the activities and needs of the pupils; (ii) they enlist the co-operation of the pupils; and (iii) they are specific and immediate, not general and ultimate."

According to Dewey, therefore, there are neither any concepts of universal validity nor any ultimate or general aims for education. The statement of Thorndike that the number of specific and immediate aims may run into millions lends support to this view. But when we come to consider those "specific and immediate" aims we find ourselves on the horns of a dilemma. The aim of a lesson, as Dewey quotes another author, may be to lead this boy to read Scott's novels instead of old Sleuth's stories; of another to teach this girl to sew and

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of still another to root out the habits of bullying from John's make up and so on. But why should the boy be led to read Scott rather than old Sleuth, the girl taught to sew or even bullying be rooted out of John's make-up ?

It is obvious from the above discussion that the specific and immediate aims are only guide-posts on the road to the ultimate goal but they will only be begging the question till the general and ultimate goal has been clearly defined and expounded. This goal will act as the criterion for the acceptance or rejection of the more specific and immediate goals and also indicate the degree of emphasis to be attached to it. In other words, it will furnish the directing principle for deciding what shall be done and the extent to which it shall be done in any particular situation. Commenting upon the present day education in America Boyd Bode once said, "The chief defect in American education to-day is the lack of a programme, or sense of direction. It has no adequate mission or social gospel." We are, therefore, inclined to disagree with Dewey when he says that aims of education must be specific and immediate, not general and ultimate. In our opinion the characteristics of good educational aims should be not only specific and immediate but general and ultimate also.

When we examine carefully the general and ultimate aims we find that most of them belong either to the individual or the social school of thought. These aims are vying with each other for recognition and consequent adoption not only in education but in certain other spheres as politics, economics and commerce also.

Individualism demands that maximum opportunities be available to each individual to realise his physical, moral, intellectual and spiritual possibilities unhindered by the environment and unhampered by the society in any way whatever. In the words of Sir Percy Nunn, an ardent exponent of this school of thought, "..... nothing good enters into the human world except in and through the free activities of individual men and women and that educational practice must be shaped to accord with that truth."¹ He continues, "Educational efforts, must, it would seem, be limited to securing for every one the conditions under which individuality is most completely developed—that is to enabling him to make his original contribution to the veriegated whole of human life as full and as truly characteristic as his nature permits; the form of contribution being left to the individual [as something which each must, in living and by living, forge out for himself."²

Individualists, therefore, attach supreme importance to the individual as the Reality and consider the society to have been created for his benefit. As a consequence of it the focus of educational effort is the individual and not the society. Free activity of the pupil is the method to be adopted and the main purpose of the educator is nothing but to remove the obstructions which may come up while the child is treading on the path of individual development. Development of indivi-

1. Nunn, T. P. *op. cit.*, p. 4.

2. *Ibid.*, Pp. 5, 6.

duality, it should be borne in mind, is not to be confused with eccentricity. In the words of J. S. Ross, "..... by individuality we have in mind ideals not yet attained, the attainment of which is the end not only of education but of life."¹ Individuality in this sense means, as Eucken has pointed out, "the spiritual individuality" which is acquired by the individual through "his inner strengthening by an inner world present to him," and through "his elevation by a spirituality transcending nature."²

Opposed to individuality as the aim of education is the social aim which in its extreme form regards the State as an idealised metaphysical entity which regulates and exercises absolute control over the lives and destinies of its members. It aims at sacrificing the younger generation for the sake of the society—society being the Reality and the individual only a throb in the social pulse. Those who adhere to this school of thought do not believe in any innate potentialities of the child. They believe that all traits of character and other attributes of human nature are acquired and in view of this they emphasise that it is education and education alone that can prepare individuals for the different roles they will have to play in adult life. They regard the individual as adaptable but the social environment in which he is born as fixed and standardised admitting no change and permitting no variation.

1. Ross, J. S., *Groundwork of Educational Theory*, George G. Harrap and Co., London, 1942, p. 49.

2. Eucken, *Life's Basis and Life's Ideals*, p. 96.

The exponents of this school of thought believe in imparting education through social control and their watch-words in the educative process are discipline and obedience. Educational opportunities are offered no doubt, and there may be plenty of them, but the criteria to be satisfied in each case are the needs of the State and those of the society. It is the State which determines the field where the services of an individual are most needed and not where he can acquit himself best in accordance with his own ability and aptitude. The field of work is determined by the society in its own interests and not in the interest of the individual—society being regarded as primary and the individual being considered only as a means for the betterment of the society.

At the outset these aims appear to be contradictory and opposed to each other. One believes in the innate individuality of the child, it also permits him to select courses of study according to his interests and allows him freedom to develop according to his own inclinations. But the other curbs individuality, thrusts pre-determined and fixed curriculum on him and exercises deliberate control with a view to moulding him to fit a particular pattern.

But the palm cannot be carried away exclusively by either of the two schools of thought. They have both made valuable contributions to the science and art of education. Individualists, for example, made our schools child-centred, recognised the importance of individual interests and aptitudes in the educative process, freed him from the undue

dominance and rigour of discipline and stressed the development of the moral nature of the child as a fundamental aim of education. The sociologists, on the other hand, made education more realistic, conceived the school as a society and shared the need for a closer relationship between the school and the society. They emphasised success in actual life and thus brought to the fore-front the importance of education for vocation and for citizenship. They have also been instrumental in developing "education for democracy" as a general and universal aim of education.

We, on our part, however, cannot subscribe to either of the incompatible viewpoints but tend to suggest, instead, a reconciliation and synthesis of both. In our opinion the individual and the society may both be regarded as realities neither of them being either absolutely independent of the other or be entirely dependent on it. Instead of being regarded as isolated entities, the individual and the society should be considered as functionally related to each other—individual acting on the society and the society re-acting on the individual. This kind of relationship will recognise and accept the fact that the individual has got innate potentialities which must be developed and respected. The very fact that there have been great men in every age and in every country who have risen above the prevailing standards of society and have made remarkable contributions towards the progress of society establishes the importance of the individual initiative and contribution once for all. Moreover society, in its own turn, should not be regarded as a mere sum total of the individuals. It consists of individuals, no doubt, but the

configuration, as the Gestalt psychologists put it, is greater than the parts it consists of. Individuals, as it has been said, come and go, but there is something in the general nature of the society which remains unchanged for a long time. It is a kind of intangible spirit which arises out of the social heritage and environment and may be productive of a great, permanent and inspiring effect. The individual, it cannot be denied, is born social and lives in society. As such he has not only to develop in society but also through it. His individuality, it can be safely affirmed, has no meaning apart from society. But it is not to be a one-sided affair in either case. As mentioned earlier, no society can ever exist without individuals who are its members. It is certainly influencing its members but it would be wrong to suppose that it remains unchanged, uninfluenced and unswayed by the contribution of its members. The individual and the society, in fact, are so vitally inter-related and inter-connected that each is being constantly affected by the other—the effect in certain cases being appreciable, important and lasting, in certain other cases being slight, insignificant and transitory.

It is evident from the above that socialisation and development of individuality may both put together be taken as the aim of education. To be exact education may be defined as the highest development of the individual as a member of the society. As such the progress of the individual and that of the society will not be conflicting or contradictory but will be complementary to each other and

social control on the one hand and individual initiative on the other will forge ahead hand in hand.

The Educational Policies Commission of the National Education Association has identified four aspects of education which must be catered to with a view to attaining the objective specified in the above paragraph. It would be useful to quote here rather extensively from the report itself :—

"These aspects centre around the person himself, his relationship to others in home and community, the creation and use of material wealth and socio-civic activities. The first area calls for a description of the educated *person*, the second for a description of the educated *member of the family and community group*; the third of the educated *producer or consumer*; the fourth of the educated *citizen*. The four great groups of objectives thus defined are :—

1. The objectives of Self-Realization.
2. The objectives of Human Relationship.
3. The objectives of Economic Efficiency.
4. The objectives of Civic Responsibility."

These broad areas of objectives have been further subdivided into from eight to thirteen more specific objectives and this sub-division provides a useful hypothesis for teachers and others to work upon.

But before we close our discussion of values in education, we must consider another important problem which educationists have to face in modern times and this is the problem of Religious Education. Our country, it can hardly be

denied is known all over the world as an essentially religious country. In fact in olden days religion was the pivot round which every aspect of life revolved in our country. It was, therefore, just natural for the system of education to be essentially religious in those days. Whether in regard to aim of education or content thereof, religion was the principal bias and most fundamental determinant. The Vedas and the other religious books were the principal subject matter for study in ancient India. This was so not in case of the Aryan Civilisation only, Muslim educational institutions in mediaeval India were invariably attached to mosques.

The present system of education in our country, however, has completely departed from the past traditions. Being a system imported from abroad, it has had little relation to or consideration for the life of the people and their ancient moorings. Following the policy of religious neutrality, the British rulers banished religion from our schools and made education, as James has put it, "godless." With the achievement of Independence, however, we are faced with the problem of nationalising our educational system, reorientating it to our social situations and reforming it keeping in view our traditions and particular genius.

There will be some people in this country as elsewhere who are uncompromising on the introduction of religious education in our schools. They assert that religion is nothing but an expression of crude and mediaeval philosophy and add that in practice its ethics is enforced by the threat of hell and the prospects of heaven. They also plead that religion has, in the

past, been instrumental in giving rise to dogmatism and fanaticism. They also assert that there have been frequent wars, in the past, for the sake of religion. Some extremists will even go to the extent of saying that religion instead of teaching morality is often responsible for greatly immoral actions. As a proof of this they point to the recent happenings in this country which preceded and followed the partitioning of the country on communal grounds. Religious fanaticism was let loose, men and women were lynched only because they belonged to another sect, houses were burnt, shops were looted, and other sorts of atrocities were perpetuated in the name of religion.

In reply to these critics we have to say that in stressing the inclusion of religious education in our schools our aim is not to propagate the tenets of different faiths but provide a sanction for morality both in schools and in society. Some people might object to this statement and assert that morality exists in one's own inner self which may be designated as the moral conscience. Modern sociologists go a step further and try to do away with the mystical aspect of the theory of moral conscience. According to them moral conscience is nothing intuitive in an individual but it is derived from society—the social norms and values being spontaneously and unconsciously assimilated by the individual. The sanction of morality, according to them, therefore, is neither religion nor moral conscience but social control.

The existence of general agreement about the desirability of inculcating morality in schools cannot be challenged.

Differences of opinion, however, do exist in regard to the method for the purpose. For a practical worker, however, an eclectic approach is most desirable. Religion, as we look upon it, is the expression of the world-view held by a group of people. It is, therefore, natural that their conception of good and bad should be deduced from it. Religion, we should like to emphasise, has nothing more to fear than not being sufficiently understood. We are in complete agreement with Lord Shaftesbury who once said, "All wise men are of the same religion." When he was asked by a lady in the room what that religion was, he replied, "Madam, wise men never tell." Samuel Johnson is stated to have said, ".....All children, whether Papists or Protestants, agree in the essential articles, and that their religious differences are trivial, and rather political than religious." Emerson made a similar comment when he said, "I do not find that the age or country makes the least difference ; no, nor the language the actors spoke, nor the religion which they professed, whether Arab in the desert or Frenchman in the Academy. I see that sensible men and conscientious men all over the world were of one religion."

The tragedy of religion, however, is that most of their followers will quarrel for religion, write for it, fight for it and even die for it; they will in fact do anything but live for it. If this sort of fanaticism in religion should have a check, it is absolutely essential that contact with it should be made in an intellectual environment. It is necessary to develop and inculcate the habit of unprejudiced thinking about religious

problems and this is where the schools have to play an important role. In a country like India which has many religions, religious education should be directed towards impressing the essential similarities between all religions and in developing respect for all of them. It should be directed towards impressing the essential similarities between all religions and it should give a general basis for deriving the concepts for good and bad. We would like to quote here from Praed who said in his chant of Brazen Head :—

“I think while zealots fast and frown,
And fight for two or seven,
That there are fifty roads to town,
And rather more to heaven ”

Apart from what has been said above we strongly feel that as long as Religion occupies a place in society, it cannot be disowned by or dismissed from our schools. What is important from our point of view is to stress the essential unity and oneness of all religions and propagate and practise the ideal of international brotherhood. The real object of religious education will be fulfilled only by making better men and women and not by merely instructing people in the tenets of a particular faith. We are firmly of the opinion that only that education which is based on religion can deliver the goods and be instrumental in producing, maintaining and developing a civilization which can defend itself against the so frequent lapses into barbarism caused both from within and from without.

Chapter II

Teachers

IT is certainly strange, if not unfortunate, that so much has been written and said about the types of school building and classroom furniture, about the methods and techniques of teaching, about the curriculum and syllabi of instruction, and about the use of text-books and other devices of teaching that most of us seem to ignore the all-important fact that ultimately it is the teacher on whom the real success or failure of any method, technique or procedure depends. The personal element in fact not only sows the seeds but it also determines the success or otherwise of the machinery, material and management in the domain of education. In consequence of this wrong emphasis, the importance of the teacher tends to be utterly ignored and in the vast esplanade of education this being is allotted only a small corner and the concourse passes by pushing him further into it.

The result of this misguided and misplaced dogmatism is a general degradation of the entire educational pattern. The sad results are already being reflected in the lower academic standards in our institutions as well as in an all-round deterioration in student discipline. Some people have even gone to the extent of saying that a veritable educational chaos seems to be in the offing. Things must be in a real mess to evoke the sharp remark in the form of rebuke from Pandit Jawaharlal Nehru, our beloved Prime Minister, whose sincerity of faith and conviction stands above doubt, that he would

rather like the closing down of all universities than tolerate a situation as once existed in Lucknow. "Students go to the institutions to learn, to sharpen their minds and intellect and not to create impossible and untenable situations by resorting to all kinds of tactics," said Pandit Nehru, and we have to remind our readers that Lucknow is only one of the latest examples of student in-discipline. Similar unhappy incidents have been happening at other places also.

When we ponder over this problem, we wonder as to what is the real cause of this sad state of affairs. Some may attribute it to the existence of certain political parties in the country who are always on the look-out for such sparks that may put the whole framework of law and order in the country to ashes. Placed as we are, it is very difficult for us to pronounce judgment on this point. It may be true, it may not be true. But if it is true or even partly true we must say with all the emphasis at our command that it deserves universal condemnation. Such persons might profess on their part to be the well-wishers of society but as a matter of fact they are the greatest enemies of the motherland.

Some enthusiasts try to dismiss this as inherent to the transitory state through which the country is passing. We on our part attribute it, as mentioned elsewhere, to the kind of education imparted in our educational institutions. It cannot be denied that educational practice in our country has not been able to keep pace with the all-round development in the political, cultural, scientific and economic spheres of life prevailing to-day and the prime cause of this relapse is the quality of

the teaching personnel. In the words of Tyndall, "If there be any profession of paramount importance, I believe it is that of the Schoolmaster; and if there be a position where selfishness and incompetency do most serious mischief, by lowering the moral tone and exciting contempt and cunning where reverence and noble truthfulness ought to be the feelings evoked, it is that of the Governor of a school. When a man of enlarged heart and mind comes among boys—when he allows his being to stream through them, and observes the operation of his own character evidenced in the elevation of theirs—it would be idle to talk of the position of such a man being honourable. It is a blessed position. The man is a blessing to himself and all around him."

The significance of these remarks was duly realised in ancient India. Consequently the Indian teacher in those days commanded much respect and held a very high position in society. He was known as a Guru which according to one of the Vedas means "destroyer of darkness." He did not demand any fees—if he did, he did not remain a Guru any more. Apart from this he treated his students as members of his own family and looked after them to the best of his ability. He was a true nation-builder and as such his services were so much appreciated by the society that even kings had to bow their heads before him. It would be useful here to quote from the Ordinances of Manu. According to them, "A teacher is the image of Brahma; a father is the image of Prajapati; a mother is the image of the Earth." At another place it is stated, "By devotion to his mother he obtains this world; by devotion to his father, the middle world; but by obedience of

his Guru, the Brahma world." Finally, it is laid down that "Of him who gives natural birth and him who gives knowledge, the giver of the knowledge is the more venerable father "

This was the state of affairs in ancient India. It was an outcome of this that the standards of education in India were so high and its contribution to the pool of world civilisation so great. The position to-day has, however, changed—changed beyond recognition. The respect which the teacher once commanded and the status that he enjoyed are conspicuous by their absence. The teaching profession in fact is looked down upon by a majority of people and it cannot be denied that a high percentage of the incumbents join it only as a last resort. The scales of pay in the profession are generally unsatisfactory, the conditions of service unhappy, the provision of facilities fragmentary and the standards of expectation, in most of the cases, much too high. As a result of this the whole profession is to a large extent indeed full of dissatisfied, frustrated people who see no meaning in work and find no joy in life. This is not all. The society also on its part, treats the teachers rather indifferently and this aggravates the hopeless situation still further. As a result of this the teachers, instead of willing to remain on their posts of duty and discharging their obligations in the best possible manner to those entrusted to their charge, are on their part anxious to escape from it. Besides, most of them have to think of ways and means of supplementing their incomes so as to make both ends meet.

It is evident from the above that if any improvement or reform is desired in education, the first requisite is to

improve the quality of teachers. In the words of the Report of the Secondary Education Commission (1953), ".....the most important factor in the contemplated educational reconstruction is the teacher—his personal qualities, his educational qualifications, his professional training, and the place that he occupies in the school as well as in the community." The report continues, "During our tour we were painfully impressed by the fact that the social status, the salaries and the general service conditions of teachers are far from satisfactory..... They have often no security of tenure and their treatment by management is, in many cases, inconsistent with their position and dignity. It is surprising that in spite of the recommendations made by successive Education Commissions in the past, many of the disabilities from which teachers suffer, still persist and adequate steps have not been taken to remove them." The report further states, "If the teacher's present mood of discontent and frustration is to be removed and education is to become a genuine nation-building activity, it is absolutely necessary to improve their status and their conditions of service."

It is high time, therefore, that we started paying greater attention to the import of the teaching personnel in our educational institutions. It is a happy augury of the times that our leaders are already thinking on these lines. Some of them feel that the trick can be done by increasing the salaries of teachers by a few rupees. Others think that by inviting them once in a while to an official reception and giving them

1. Report of the Secondary Education Commission, Ministry of Education, Govt. of India, 1953, p. 155.

front seats is just sufficient. There are still others who feel that a mere reference to the nobility of the profession and appealing to the teacher's sense of service and sacrifice will be enough. It should, however, be carefully borne in mind that none of these things by itself will suffice to achieve the desired end. Moreover, whatever is done by way of improving conditions in this respect should not come in the form of or take the shape of charity. What is essential is that the public should be educated to realise the great national importance of the teachers as the architect of society. As stated above, the 'Guru' in olden days was held in high esteem in India. It is really sad that we should have so soon become oblivious of our own history and forgotten the exalted examples of our Gurus.

But it should be realised at once that the respect of a teacher cannot be a one-sided affair. In order to regain the lost respect and retrieve the former status, the teacher has to be a Guru in the true sense of the word. He is not to be a person who merely takes up a teaching job. A real teacher is he who by his mental attitude and faith becomes a teacher. He takes up teaching not to earn his living but to serve humanity by teaching them to live better and more useful lives. He looks upon his work not as a job but as a sort of dedication. He in fact should live up to the ideal of the Unknown Teacher whose praise is sung by the late Dr. Henry Van Dyke in the following words :—

"I sing the praise of the unknown teacher. Famous

educators plan new systems of pedagogy, but it is the unknown teacher who directs and guides the young. He lives in obscurity and contends with hardship. For him no trumpets blow, no chariots wait, no golden decorations are decreed. He keeps the watch along the borders of darkness and makes the attack on the trenches of ignorance and folly. Patient in his daily duty, he strives to conquer the evil powers which are the enemies of youth. He awakens sleeping spirits. He quickens the indolent, encourages the eager and steadies the unstables. He communicates his own joy in learning and shares with boys and girls the best treasures of his mind. He lights many candles which, in later years, will shine back to cheer him. This is his reward. Knowledge may be gained from books, but the love of knowledge is transmitted only by personal contact. No one has ever deserved better of the republic than the unknown teacher. No one is more worthy to be enrolled in a democratic aristocracy, 'King of himself and servant of Mankind'."

The question that now forces itself upon us is, "What makes a good teacher?" A simple and ready answer is "his personality". Now it is very difficult to define precisely what we mean by the term personality. This word has been used in a number of ways. Allport, for example, has distinguished as many as fifty meanings of this word. The number of definitions of this term is also unlimited. But without entering into a detailed discussion of its meaning or definition we can lay down a few qualities or characteristics which may be said to constitute a teacher's personality. It seems desirable here to refer to a

check-list drawn up by Schorling¹ for evaluating a teacher's personality. This list may be useful for our purpose until we make a list of our own because it can certainly help us in forming a workable estimate of a person and his qualities in so far as his work as a teacher is concerned. This check-list is reproduced below :—

Suggested Traits	Balance of Work	Fair	Good	Excellent
1. Emotional stability and mental health.				
2. Personal appearance.				
3. Health and Vitality.				
4. Honesty, Character and Integrity.				
5. Adaptability.				
6. Co-operation.				
7. Voice or speech.				
8. Leadership.				
9. Resourcefulness.				
10. Sociability.				

The above check-list is not the only list available for the purpose of assessing teachers. There are many others going especially in progressive countries. But it would be useful and profitable for us to evolve a list of our own for the purpose. The first thing that has to be done in this connection is to define the qualities of a good teacher. There are many methods

1. Raleigh Schorling and Batchelder, *Student Teaching in Secondary Schools*, McGraw-Hill Book Company, Inc., New York, 1956, pp. 12, 13. (With the permission of the Publishers).

of doing this. We, therefore, suggest some of these methods in the hope that every employing authority and training institution will try to follow these methods and thus evolve a list of its own. These lists will help them a great deal in devising objective methods of selecting candidates for training or for employment and in turn will lead to improving matters to a remarkable degree.

One of the methods to find out the requirements of good teaching is that of analysing the biographies of a few good teachers. We may find such studies especially helpful in gaining an understanding of qualities that made these teachers 'good'. Qualities will of course include some human factors besides their academic and technical components. Another idea may be to study some living persons who have achieved laurels as teachers and discover the traits which made them attain such heights. These may in turn be compared with the traits discovered from the published biographies—fact or fiction. It should be noted that it is not difficult to find such published works. The life story and speeches of Mahatma Gandhi, Pandit Jawaharlal Nehru, Dr. Rabindranath Tagore are just a few names available for the purpose. "Good-Bye, Mr. Chips," represents another set of books which could serve the purpose admirably well. Such analysis could form an excellent project for research in education especially because it has remained neglected for such a long time and whatever work has been done on this problem is mostly subjective. This project, moreover, should not be restricted to the national boundaries only but teachers in some of the progressive coun-

tries should also be studied if possible. The sampling should be as extensive as possible so that the data collected and the conclusions drawn therefrom are authentic, reliable and trustworthy.

Another method to achieve the same end is to study the everyday work of the teachers. It should be spread over a number of days and cover all the aspects of their work and duties. This will tell us what problems a teacher has to face, what situations he has to meet and what roles he has to play in order to accomplish his job successfully. The investigation can be split up into two parts—first, we should tabulate after a careful study, the duties performed by an average teacher, and secondly, should find out the skills, abilities and knowledge required in order to be able to perform those duties successfully. Here again we should study a very large number of cases spread over a wide area and period so that our results are as near authentic as possible.

W. W. Charters and Douglas Waples of the University of Chicago carried on one such investigation in 1929 and as a result of their investigation listed the following 25 traits necessary for teachers. These qualities are :—

- (1) Adaptability ; (2) Attractive personal appearance;
- (3) Breadth of interest ; (4) Carefulness ; (5) Considerateness;
- (6) Cooperation; (7) Dependability; (8) Enthusiasm; (9) Fluency;
- (10) Forcefulness; (11) Good Judgment; (12) Health;
- (13) Honesty; (14) Industry; (15) Leadership; (16) Magnetism;
- (17). Neatness; (18) Open-mindedness ; (19) Originality;
- (20) Progressiveness ; (21) Promptness ; (22) Refinement ;

(23) Scholarship ; (24) Self-control ; (25) Thrift.¹

Another set of people who come in very close touch with the teachers are the pupils. As such they constitute a group specially suited to judge the effectiveness or otherwise of a teacher's qualities. It is an admitted fact that we have to have teachers who are liked by students and certainly only such teachers are desirable teachers. This again is an interesting topic for Indian research workers in education. Hart completed such a study in 1934. He finalised two lists viz. (a) a list of traits that go to make a teacher most likable to a student, and (b) a list of traits that go to make a teacher most disliked by a student. These lists are quoted below in full for reference :—

TABLE A²

Reasons for liking "Teacher A" best, arranged in order of
Frequency of Mention, as reported by 3,725
High School Seniors.

Reasons for liking "Teacher A" best	Frequency of mention	Rank
Is helpful with schoolwork, explains lessons and assignments clearly and thoroughly, and uses examples in teaching	1,950	1

1. Charters, W. W., and Waples, Douglas, *The Common-wealth Teacher Training Study*, University of Chicago Press, Chicago, 1929, p. 18.

2. Hart, Frank W., *Teacher and Teaching*, The Macmillan Company, New York, 1934, pp. 131, 132.

Reasons for liking "Teacher A" best	Frequency of mention	Rank
Cheerful, happy, good-natured, jolly, has		
a sense of humour, and can take a joke ...	1,429	2
Human, friendly, companionable, 'one of us' ...	1,024	3
Interested in and understands pupils ...	937	4
Makes work interesting, creates a desire to work,		
makes class-work a pleasure ...	805	5
Strict, has control of the class, commands respect	753	6
Impartial, shows no favouritism, has no 'pets'...	695	7
Not cross, crabby, grouchy, nagging or sarcastic	613	8
"We learned the subject" ...	538	9
A pleasing personality ...	504	10
Patient, kindly, sympathetic ...	485	11
Fair in marking and grading, fair in giving		
examinations and tests ...	475	12
Fair and square in dealing with pupils, has good		
discipline ...	366	13
Requires that work be done properly and promptly,		
makes you work ...	364	14
Considerate of pupil's feelings in the presence of		
the class, courteous, makes you feel at ease ...	362	15
Knows the subject and knows how to put it over	357	16
Respects pupils' opinions, invites discussion in class	267	17
Not superior, aloof, "high hat", does not pretend		
to know everything ...	216	18
Assignments reasonable ...	199	19

Reasons for liking "Teacher A" best	Frequency of mention	Rank
Is reasonable, not too strict or 'hard boiled'	... 191	20
Helpful with student's personal problems, including matters outside of class-work	... 191	21
Dresses attractively, appropriately, neatly, in good taste	... 146	22
Young	... 121	23
Work well planned, knows what class is to do	... 110	24
Enthusiastically interested in teaching	... 108	25
Gives students a fair chance to make up	... 97	26
Home-work assignments reasonable	... 96	27
Recognises individual differences in ability	... 96	28
Frank, "straight from the shoulder," a straight shooter	... 78	29
Personally attractive, good-looking	... 78	30
Teaches more than the subject	... 74	31
Interested in school activities	... 68	32
Sticks to subject	... 53	33
Modern	... 52	34
Sweet and gentle	... 50	35
Pleasing voice	... 50	36
Intelligent	... 42	37
Prompt and businesslike	... 41	38
Sincere	... 36	39
Knows more than the subject	... 32	40
Has pep	... 31	41

Reasons for liking "Teacher A" best	Frequency of mention	Rank
Uses good judgment ...	22	42
Cultured and refined ...	20	43

TABLE B¹

Reasons for liking "Teacher Z" least, arranged in order of
Frequency of Mention, as reported by 3,725
High School Seniors.

Reasons for liking "Teacher Z" least	Frequency of mention	Rank
Too cross, crabby, grouchy, never smiles, nagging, sarcastic, loses temper, "flies off the handle" ...	1,708	1
Not helpful with school work, does not explain lessons and assignments, not clear, work not planned ...	1,025	2
Partial, has 'pets' or favoured students, and 'picks on certain students' ...	859	3
Superior, aloof, haughty, "snooty", over- bearing, does not know you out of class ...	775	4
Mean, unreasonable, "hard-boiled", intolerant, illmannered, too strict, makes life miserable ...	625	5
Unfair in marking and grading, unfair in tests and examinations ...	614	6
Inconsiderate of pupil's feelings, bawls out pupils in the presence of classmates, pupils are afraid, and ill at ease and dread class ...	551	7

1. Ibid., pp. 250, 251.

Reasons for liking "Teacher Z" least	Frequency of mention	Rank
Not interested in pupils and does not understand them ...	442	8
Unreasonable assignments and home work ...	350	9
Too loose in discipline, no control of class, does not command respect ...	313	10
Does not stick to the subject, brings in too many irrelevant personal matters, talks too much ...	301	11
"We did not learn what we were supposed to" ...	275	12
Dull, stupid and uninteresting ...	275	13
Too old-fashioned, too old to be teaching ...	224	14
Not "fair and square" in dealing with pupils ...	203	15
Knows the subject but can't put it over ...	193	16
Does not hold to standards, is careless and slipshod in her work ...	190	17
Too exacting, too hard, gives no chance to make up work ...	183	18
Does not know the subject ...	170	19
Does not respect pupil's judgment or opinions ...	133	20
Too changeable, inconsistent, unreliable ...	122	21
Lazy, not interested in teaching ...	115	22
Not friendly, not companionable ...	98	23
Shows boy or girl favouritism ...	95	24
Dresses unattractively or in bad taste ...	92	25
Weak personality ...	85	26
Insincere ...	75	27

Reasons for liking "Teacher Z" least	Frequency of mention	Rank
Personally unattractive ...	65	28
Does not recognise individual differences in pupils ...	64	29
Voice not pleasant ...	63	30

Of the two lists reproduced above the first list shows that a vast number of students is of the opinion that the best teacher has to help them with school work, explain lessons and assignments to them clearly and thoughtfully and use plenty of examples in teaching with a view to illustrating the material and making it easily intelligible. This shows that the first requisite of a good teacher is to be good at teaching in the classroom. It will be very interesting to see how our pupils stand as compared with their American counterparts.

Some of our readers might argue as to the utility of table B. It shows traits that a good teacher should not possess. In our country the need for such a survey is very necessary because a large number of present-day teachers consists of persons who had to take up the teaching profession without in any way having been prepared for it. "He is a graduate, therefore he can teach" has held sway for quite a long time and whatever training certificate, diploma or degree is insisted on is done in order to earn increments instead of being regarded as a pre-requisite to the securing of a job. If Indian education is to develop, such elements must be weeded out and this table may help us a good deal in the process.

The Headmasters of schools are another set of people who have to deal with teachers everyday and should know very well the qualities of a successful teacher. We could collect the opinions of a large number of such headmasters and categorise them.

Another method to collect such data may be to contact a large number of thinking educationists, members of Training College Staff, parents and others connected with education and elicit from them a list of qualities that they expect of a successful teacher.

After all this data has been collected, one could finalise a list of qualities that an average successful teacher should possess. The list could be validated by applying it on a number of teachers reported as successful in various schools. It is not possible to find a teacher having all the qualities but a good teacher must have a good number of these. After validation our list may be altered here and there if need be and the final list will be ready for use, help and reference.

In the above paragraphs we have suggested some techniques of discovering the qualities of a good teacher. But it should be remembered that the job is not easy. Many attempts have been made in other progressive countries to define these qualities as exactly as possible but still no standardised and objective plan is forthcoming. The main difficulty in this respect is that of isolating the traits which are essential for success in teaching. In our country nothing worthwhile has been done in this respect so far.

Another reason for lack of advancement in this direction is the fact that there has been no need of selecting suitable

hands for this profession. Anybody who had a desire or was driven by circumstances to become a teacher became one. Mr. K.L. Shrimali has carefully analysed the position in this respect in one of his recent pamphlets on 'Better Teacher Education'. He writes as follows :—

“A general survey of the teaching profession will reveal that a large majority of teachers do not enter this profession by choice but are forced into it by circumstances. It will also be found that people who go into the teaching profession come mostly from families belonging to lower middle and lower income groups in the community. The children of administrators or of professional men such as doctors, lawyers, engineers, big businessmen or landlords rarely enter the teaching profession but children of farmers, small businessmen and clerks are found in abundance. Students who can afford to pay for their higher education go up to the University and try for jobs which will bring money and prestige. Those who have received higher education at Universities as regular students rarely think of becoming teachers in a school. It is only when they have failed to secure more lucrative jobs in other professions that they become teachers. They are always on the look-out for better jobs elsewhere and as soon as they get an opportunity leave teaching profession.”

The greatest problem before us to-day, therefore, is to improve the standard of teachers and remove the feeling of frustration which is writ large on their faces. This profession

1. Shrimali, K. L., *Better Teacher Education*, Ministry of Education, Govt. of India, 1954, p. 4.

should not be the Cindrella of professions but it should be given its due importance and assigned its proper place. This can be done to some extent by offering them respectable salaries and raising their status in society. But these things will not be enough. What is equally essential, if not more so, is the desirability of finding ways and means of recruiting only those who are suitable for the profession and have proper professional aptitude. This can be done only by making the selection fairly early in life and then giving them the necessary training to equip them properly for the profession. This should be done keeping in mind the dictum that training can benefit only those who, though mature in mind, are also sufficiently raw. It is, therefore, imperative that the working of the teacher training institutions be completely re-orientated.

The Indian Universities Commission (1949) in their valuable report have also emphasised the need for a remodelling of courses in the various training institutions. They are of the opinion that the practical side is not given its due emphasis in training. About three-quarters of the work done in institutions of teacher education is theoretical, although it has been established many times over that efficiency in theory is not always compatible with corresponding efficiency in practice. This is primarily so because teaching is not only a science but an art also.

This, however, does not imply that no theoretical background is needed. All practice, it must be borne in mind, has its roots in theory. But the word "training" has come to be

1. *The Report of the Indian Universities Commission*, Ministry of Education, Govt. of India, 1949, pp. 210, 211.

a very mischievous word in education. It is the general impression that when graduates and others join a teacher training institution they are lost to the "pure uplands of scholarship, squelching steadily into the marshes of technical education." It, therefore, follows that teacher training is not just an addition of techniques, it is to acquaint students with all that goes by way of education and thus to broaden the range of the teacher's personality. It is, therefore, the latest opinion that 'Teacher Training' does not fully represent what should be done in a Training College. 'Teacher Education' is suggested to replace the earlier term.

Teacher education has four main aspects of study. First of all, there is the vast theme of the nature of education and values in education. This we may call the 'Why' and 'What' of education, and naturally this aspect affects the entire edifice. Secondly, there is the historical aspect which is very necessary to understand the nature and the growth of our educational system and the development of educational practice. Thirdly, there is the methodology of school subjects closely linked with what is the psychological aspect of study. It includes the nature of development of children and adolescents on the one hand and the principles of curriculum construction on the other. Finally, there is the practical experience of teaching and of class and school management. A close link exists between some of the aspects outlined above. Indeed one of the main jobs of the schools or colleges of education should be to avoid overlapping to any wasteful degree while giving the fullest possible coherence to the various aspects of teacher education.

Mere listening to lectures delivered by the school or college staff is not sufficient background in theory. Work in the library, writing of essays, participation in tutorial seminars, workshops, debates and other social activities are of equal importance. Opportunities have to be provided for activities that stimulate imagination and powers of judgment and criticism. A working knowledge of the more popular audio-visual aids is also very essential besides some training in arts and crafts. It will be a sad commentary on our educational standards if a high school teacher does not know anything about an ordinary epidiascope or about the drawing of maps or the making of models.

A serious charge against the practical side of training in Colleges of Education is that this kind of work is done in rather unreal conditions. Much that a trainee does in connection with a criticism or a practice lesson as a part of his training is not possible to be done in actual schools when time-tables are overcrowded, equipment scarce and the number of students unmanageable. Furthermore, the present training does not include much that a teacher has to do as a part of his job in schools—keeping of accounts, posting of registers, arranging and organisation of games and functions. The practice period is, as a rule, confined to teaching a couple of periods everyday and that is all. To get an overall idea of the work of a school, it may be better if a trainee is completely deputed to a school for a particular period, say three months, and is treated as an ordinary member of the staff, sharing equally with the permanent staff the entire

burden of school work in its different forms. If the reports about his work and behaviour during the period of deputation are good, the importance of the final examination in teaching skill is automatically reduced to zero.

The teacher, it must also be remembered, does not learn the last word in education in a Training College. In fact there is no last word in education. Education is dynamic and not static and as such its philosophies and techniques are always undergoing changes. A good teacher will and should try to keep pace with all these changes and keep himself abreast of the latest developments. In this way he always remains a learner. It is, therefore, imperative that maximum facilities should be provided in this direction. Books and journals on Education help a lot in the achievement of this ideal. But they are not the only means to the in-service growth of teachers. Refresher and vacation courses should be a regular feature of all Colleges of Education and teachers working in schools should be encouraged to attend them and they should get all possible facilities for this. These courses should be organised not only on education in general but also on particular subjects and specific problems. Variety and intensiveness should be the watch-words of these courses and they should be so designed as to lead to increased efficiency not only in academic spheres but also result in social gain through mutual discussions and community living. In this way they will make the teachers attending the courses mentally alert, intellectually active and socially useful.

The reorientation of the courses in Training Schools and Colleges, as suggested in the above paragraphs, is

absolutely essential. There are many reasons for this—the first and foremost of them being the changed conditions in our country. Prior to the achievement of independence, the function of the teacher in this country was very simple—it was merely preparing pupils for examinations with a view to enabling them to secure jobs and earn their livelihood. The undue emphasis on English at the cost of the mother-tongue and the inexpedient pursuit of the Western ideals to the complete elimination of our own ideals and culture degenerated the standards of education in general and debased those engaged in it in particular. The teacher, therefore, through sheer force of circumstances started looking upon his profession not as a vocation imbued with a spirit of dedication but as a career where trade-unionism held its sway. In this way he succumbed to economic forces and turned into a materialist looking at everything from the point of view of return in material value and caring little for the high ideals of his predecessors.

Another set of reasons which makes the reorientation of training courses imperative is the change in the function of the school. A school is no more regarded as a knowledge-monger's shop but is universally accepted as the custodian of the physical, mental, moral and social life of those entrusted to its charge. The teacher, therefore, has not to develop a particular aspect of the pupils' personality but has to take into account the properly balanced and integrated personality of the whole man, the "co-education of body, mind and spirit," as Jacks has called it.

In regard to the re-orientation advocated above, it should be carefully borne in mind that the problem of teacher training is more difficult and the task that it envisages is more onerous than the job of training professional workers in any other field of activity. The reasons for this are manifold. In the first place, the material in this case is extremely delicate and it is far more easily spoiled than the material at the disposal of any other artist. In the second place, the teacher has to deal with a group knowing full well that the members composing the group differ from each other in almost all respects and that these differences can only be ignored at the cost of efficiency in work and effectiveness in output. In the third place, intending teachers are not, as a rule, sufficiently equipped to discharge their duties properly. Their outlook is usually narrow and their knowledge fragmentary. In the fourth place, and this makes things still worse, the would-be teachers possess certain ideas and notions which are positively harmful and which must be removed before their development can begin on right lines. Our experience in this field has convinced us that most of them believe that education is something that adults do to the young; that it consists of repression and external order; and that it is nothing but acquiring of knowledge, learning of facts and committing of certain formulae and tricks to memory. It is indeed a long way and quite difficult, too, to let them realise that education is a release, a responsibility—a growth towards freedom and a training in the fulfilment of the responsibilities of freedom.

The significance of these remarks is being increasingly realised in our country these days and it is felt that all schemes

of educational reconstruction, however grand they may be, will fall through unless they are manned by the right type of teachers. The teacher in fact is the pivot of the whole system and that is why he has been called "the architect of society," and the institutions that he mans are known as the "cradles of civilisation." If our country, therefore, has to rise and regain its proper place in the comity of nations, it is absolutely essential that the necessary change of emphasis in the dynamic educational thought and philosophy be brought about and that can be done only by improving the teaching personnel. It is only this that will lay the foundations and assure the turning out of future citizens imbued with right spirit and enthusiasm and backed by the requisite knowledge in support of these. The teacher also should give up the age-old lethargy, realise the importance of the job entrusted to him and dedicate himself to it. He should consider himself as the "King of himself and servant of mankind."

Chapter III.

Administration

JAMES MILL, the famous English philosopher once said, "If education does not perform everything there is hardly anything which it does not perform." The importance of this far-reaching truth has begun to be increasingly realised only in recent years. In the past we paid only lip service to this vital and essential service—a service on which the progress of a country nay the safety of the whole world depends. But it is heartening to note that conditions in this respect are changing and changing fast and all progressive countries are beginning to regard education not only as a first necessity but also a first charge on their finances. In view of this it is no longer regarded as the sole monopoly of private agencies like the family or the church, but is considered as a whole nation's responsibility and is given the highest priority. This is why Acts have been passed and Laws are being promulgated to make it compulsory and free as far as possible. Education is thus not only on the road to become the privilege but also the birthright of every individual in any country worth its name.

The extension and expansion of education are thus accomplished facts. But it should be noted that they are not enough by themselves. Provision of education is one thing, but to safeguard its quality and keep up the standards is another. This is so because in case the kind of education imparted in the institutions of a nation by the various agencies at work is not of the right type, it will do more harm than

good. Education, may thus, become a boon or a bane. Consequently, it is too serious and too important a matter to be left to the mercy of an individual or a group of individuals, unmindful of the quality or the standard. It is, therefore, imperative to see that the work is properly perceived, carefully planned, prudently directed and thoughtfully supervised.

The proper perception, careful planning, prudent direction and thoughtful supervision lead us to the tasks of educational administration which may be defined as the means which determine the purpose or purposes of education and lay down the best and most effective methods of realising them in practice. The problems of the educational administrator, therefore, include selection of teachers and matters pertaining to appointment of teachers, assignment of work to teachers and co-ordination of their efforts, supervision of instruction and drawing up of plans of work, co-operation between managers and personnel, between personnel and pupils, and between managers, supervisors, pupils and their parents. These are some of the important elements in the work and domain of an educational administrator. Pittenger in one of his studies on "Organising the field of School Administration" has divided the duties and functions of an educational administrator into three categories which may be grouped as 3 P's. They are as follows :—

1. Personnel : its procurement, co-ordination and leadership.
2. Policies : their creation, implementation and improvement.

3. Performance : the achievement of sound educational goals or objectives.¹

It might be interesting to mention here that till the turn of the present century, educational administration was looked upon as an extremely simple and straightforward matter. Its need might or might not have been felt in the years prior to that but it cannot be denied that the achievements in this direction were in no way either sufficient or remarkable. In the words of Moore², "There was little educational literature which would enrich the experience of the beginning Superintendent before 1900. The educational administrator was able to receive a preparation for his work only in the school of experience." The approach to the whole problem at that stage and for quite a long time thereafter was, therefore, nothing but empirical.

There is, however, an interesting thing to take note of. The kind of approach we have suggested above could, in those days, provide a good deal of sustenance and continue unhindered because of the simplicity and inadequacy of the problem. Education in those days had, more or less, a very narrow and parochial outlook. It consisted entirely in acquiring the basic skills and memorising certain facts. It did not go beyond this and the modern concept which considers education as co-extensive not only with life but with living was just non-existent.

1. Pittenger, B.F., Organising the Field of School Administration, *American School Board Journal*, Vol. 72, March 1926, pp. 41—42.

2. Moore, C.C., The Superintendent Studies the Problems of School Administration, *Educational Administration and Supervision*, Vol. 24, 1938, pp. 625—631.

This simplicity and inadequacy of approach, however, is a thing of the remote past and if it has any interest or significance for us, it is only historical. In recent years, education in this country, like education in other progressive countries, has passed through a number of vicissitudes and has also seen profound and numerous developments. In view of this there are a number of trends which have become specially conspicuous in the domain of education and which have greatly increased the exigencies of the specialised agency of educational administration and have enhanced the duties, responsibilities, and obligations of those to whom the job is entrusted. Some of these have emerged after the advent of independence and have added more than anything else to the gravity of the problem.

The most important of these considerations is the extraordinary and, in some cases, fantastic increase in the size of schools in general and that of the classes in particular. There are schools where the number of pupils in one instructional unit reaches three figures—such instances may be extreme instances but they are certainly not rare. Apart from this the catholicity of the curriculum, broadening of its concept, inclusion of a variety of subjects in the courses offered, advocacy and adoption of new teaching methods and procedures, development of new aids to teaching, emphasis on individual differences and the consequent importance of individual attention, the insistence on socialisation of instruction with its necessary concomitant as group activity, group participation and shared experience, incorporation of guidance techniques and programmes in the work of

the school and last but not least, the renewed emphasis on the extra-curricular activities have made the job of the supervisor and that of the administrator uphill and stupendous.

The trends stated above have certainly taken Indian Education out of the rut and routine of the age-old insistence on bookishness and the indecorum of the foreign system where its sole concern was to produce and send out "English-knowing clerks." With the shifting of the scene and the turning over of a new leaf in the scope, purposes and background of education it becomes only imperative that supervisory practices are also revised, renewed, refined, and reformed so as to bring them not only in harmony with the latest trends in educational practice but also become consistent with the prevailing conditions and circumstances.

In order to achieve this end the supervisors and the administrators should clearly and profoundly realise their numerous duties and responsibilities and meet them enthusiastically, conscientiously and devotedly. In this connection it will be recognised at once that the main function of those in charge of supervision and administration is to help guide and stimulate teachers to "constant growth." In many schools there are even today large numbers of untrained teachers. This is not all. In many far off areas teachers remain in constant isolation and their knowledge is hopelessly out-of-date and belongs to the hoary past. Even in average schools the time-tables are so over-crowded and facilities so meagre that it is well-nigh impossible for teachers to keep pace or be in touch with the latest trends in their subjects and with

the latest developments in educational theory and practice. It is here where the supervisor steps in to fill the gap. Moreover, he is unhindered and unhampered by local restrictions and is in the happy and enviable position of a person who can see things in a dispassionate manner, compare schools of one locality with those of another and take an objective view of the conditions and developments. In this way he can mobilise his techniques and experiences and carry them over to the teachers in different parts of the State. Finally, there is no reason why his supervision and contribution in regard to it should be restricted to the instructional aspect of education only. It should, on the other hand, cover the entire field of school activities.

Besides the above functions, educational administrator has another important function to perform. He should be the purveyor of the latest findings of research to all those he comes in contact with. He can do this by keeping himself abreast of the latest researches in the twin domain of education and psychology. In this connection it should be remembered that he should not be lost in the details and 'minutiae' of the techniques and procedures of those researches but he should find out the crux of the problem, the contribution that it makes to the study of education and the change, deviation or modification that it suggests in the methods thereof.

We are conscious of the large amount of work that is being done in this connection and the important contributions that these researches have made and are making. In view

of the enormous volume of work it might be felt that it will be impossible for any administrator to carry out the above suggestion properly and effectively. But it should be carefully borne in mind that in spite of the fact that the volume of work is prohibitive, the important discoveries which necessitate a change and modification in our procedure will not be beyond the capacity of a wise and thoughtful person possessing the powers of clear-thinking, penetrating judgment and discriminating understanding. All that he has to do is to isolate those problems which are useful instruments in furthering the purposes of education, interpret them to those entrusted with the task of education and thus elevate their ideas and ideals, practices and procedures.

In order to realise the above principles in practice, an administrator must have some qualities. While speaking of the ideal soldier for his utopia, Plato is stated to have said, "He who is to be really good and noble guardian of the state will require to unite in himself philosophy and spirit and swiftness and strength" We feel that these qualities are not only necessary for the making of a good "guardian of the state" but they are equally essential for the making of a good and successful educational administrator. We, therefore, proceed to discuss them in a brief and concise manner and bring out their nature and significance.

The first requisite in this connection is Philosophy. It implies that the administrator should be fully conscious of the purpose or purposes of education and also with the most desirable mode of achieving these purposes in practice.

It might be a platitude to remark that unless and until an administrator is conscious of the aims, he cannot select or be sure of the methods to be adopted, the procedure to be followed and the activities to be pursued ; but it cannot be overemphasised that the principle stated in this platitude is a most vital and significant presumption in education. Moreover, the educational administrator must be aware of the progressive trends so that the philosophy that he takes up is not inanimate, moribund or out-of-date in any way.

The next quality that a good administrator should possess is said to be spirit. It implies that a good administrator should be tolerant, sympathetic and democratic in his methods and outlook. He should be strictly impartial in his dealings with all and should listen to the view-points of others with patience and calmness and appreciate them. He should not discuss problems with a closed mind but should be able to maintain "equality of status" amongst his personnel and give due regard to the vast differences between individuals. It should be remembered that the kind of person for whom there are two sides to every picture, his side and the wrong side, can never prove a good administrator.

Philosophy and spirit have to be coupled with swiftness. It implies acute perception, quick understanding, keen insight and critical judgment. These qualities are essential because an administrator who is slow of understanding and lacks proper judgment and insight will not be able to inspire confidence. Besides, he will not be able to perform his duties efficiently. This is so because the work

of every administrator involves a good deal of planning and unless and until he has the qualities mentioned above, he will not be able to do justice to his job. Swiftmess, in fact, presupposes the presence of all the qualities of a good teacher also because these qualities alone will enable him to be regarded as professionally superior to the rest of the teachers. He has to be head and shoulders above them so as to be in a position to direct, guide and inspire them.

Finally, a good educational administrator must have courage. It is apparent that by the very nature of his work, the educational administrator has to come in contact with people and help them out of their difficulties. This kind of work cannot be accomplished effectively unless he has plenty of courage, confidence and firmness. He should be able to deal with situations as he meets them without harbouring any kind of fear or diffidence in his mind. In addition to this his duties may sometimes result in creating unpleasant situations, unwarranted comments, unpalatable and repelling remarks. He should be bold enough to face these things calmly, quietly and with courage.

It will be useful here to refer to a check list drawn up by Ayer and Peckham¹ for "Planning and Appraising Supervision." This list consists of 291 items and this large number of items has been classified under ten important principles of supervision. These principles are as follows :—

1. The Principle of Co-operation.
2. The Principle of Leadership.

¹ Ayer, Fred C., and Peckham, Dorothy R., *Check List for Planning and Appraising Supervision*, The Steck Company, Austin, Texas, 1948.

3. The Principle of Planning.
4. The Principle of Integration.
5. The Principle of Creativity
6. The Principle of Flexibility.
7. The Principle of Considerateness.
8. The Principle of Community Orientation.
9. The Principle of Objectivity.
10. The Principle of Evaluation.

The items in this list can be elaborated and this will provide us with another set of qualities necessary for a good educational administrator.

Another useful study in regard to the qualities or otherwise of an educational administrator was carried on in 1937 by the American Association of School Administrators on Certification of Superintendents of Schools.¹ This committee questioned 503 persons about the characteristics which they believed essential for success in the job of a Superintendent. The interviews yielded the following points, the number against each represents the frequency :—

1. Character.	...	...	419
2. Scholarship (Thoroughness, accuracy, and intelligence etc.)	...	...	419
3. Business ability (Finance, taxation, etc.)...			389
4. Personality.	...	...	371
5. Executive ability (Organisation, ability to handle people.)	...	...	364

1. The Superintendent of Schools and his Work, *Final Report of the Committee on Certification of Superintendents of Schools*, National Education Association, American Associations of School Administrators, 1940, p. 36.

6. Sociability.	...	...	343
7. Speaking ability.	...	...	318
8. Community interests.	...	...	294
9. Writing ability.	...	...	254
10. Culture.	...	...	189
11. Religious activity.	...	...	121
12. Personal contacts with teachers, students and citizens.	...	...	94

The committee also interviewed 394 persons with a view to discovering "the procedures and practices considered detrimental to superintendents they had known." The following list¹ shows the different points with their respective frequencies :—

1. Personal practices (Marital problems, immorality, dishonesty, lack of dignity, social maladjustment etc.)	...	201
2. Lack of ability :		
(a) Business.	...	184
(b) Educational.	...	161
3. Autocratic methods.	...	149
4. Political activities.	...	109
5. Failure to co-operate with community enterprise.	...	79
6. Too much speechmaking.	...	51

Still another study in this connection was made by D. H. Cooke². He made an attempt to study the personal

1. *Ibid.*, pp. 40—41.

2. Cooke, D.H., The Successful Administrator is a Leader, *American School Board Journal*, Vol. 3, 1945, October, pp. 29—30, Nov. pp. 29-30.

qualities needed by the Superintendents of schools. The result arrived at comprised qualities as intelligence, optimism, enthusiasm, originality and resourcefulness, aggressiveness, sympathy, patience, effectiveness in emergencies, ability to make good and sound decisions, knowledge of what he is doing, ability to grow with his teachers, mastery of the art of supervising and advising teachers, and willingness to trust his subordinates.

Regarding the measuring of these qualities and discovering the proportion in which these ingredients are mixed, Cooke found it an impossible job. He says, "If we could measure the qualities of leadership as the pharmacist measures his drugs, we might be able to develop the type of leadership suitable in a given situation. But we cannot boil the proposition down to a mere dosage. No one has been able to say how much of any one of the qualities is necessary in order to have leadership, but all agree that each quality must be present in at least some degree."¹

We have discussed above the role of the administrator in the domain of education and the qualities that a good administrator should possess. Before concluding this discussion we would like to point out that the administrator who believes in grabbing all power and centralising it in himself must obliterate himself. A good administrator should never consider himself to be at the top of the hierarchy where all authority and responsibility vest in him. There is a grave

1. *Ibid.*

danger in this sort of consideration because it tends to blind him to the situation as it should be really met. He is not the person whose sole job is to command with the rest of the personnel to carry out his behests. The days of dictators are gone. A good administrator should be a leader—a person who wins the co-operation of his personnel instead of bossing over them. He should look upon a school as a co-operative enterprise, regard administration as a collective undertaking and consequently strive his utmost to co-ordinate activities in such a manner as to yield the highest dividends. It must be stated at this stage that the latest trend in this respect is to regard an administrator as an educational statesman. This concept has been so well brought out by the American Association of School Administrators as to merit a rather longish quotation. In their eleventh yearbook it is stated as follows :—

“There must be a striving toward educational statesmanship. In educational administration there is always the potential choice between the principles of Statesmanship and the arts of the Politician. Statesmanship trusts facts rather than force ; rests faith upon the long-time programme, the remote ends, rather than upon the opportunities of the moment, the immediate ends ; builds a programme upon settled convictions rather than passing whims ; refuses to let the drudgery of detail obscure the vision of the larger work to be done.”¹

1. *Eleventh Yearbook*, Department of Superintendents, American Association of School Administrators, N.E.A., p. 14.

This is the real point worthy of note and every administrator should strive his utmost to realise it in practice. He should see that he becomes an educational "Statesman" and not an educational "Politician". It is a realisation of this aim alone that will enable us to march forward on the road to progress.

Let us now turn our attention to the conditions as they prevail in this country. Leaving a few honourable exceptions, we find that the educational administrator, as a rule, acts only as an 'officer' and not as a guide, inspirer or educational statesman as visualised above. He adopts the attitude of a dictator and expects obedience from others. Besides, his main job is passing orders on the files and paying visits to schools where he receives a right royal welcome. A band is played, a guard of honour is presented, he is profusely garlanded and photographs are taken. Sometimes a variety programme for his entertainment is presented so as to add to his pleasure and secure good reports from him. We haven't said anything about feeding though in many cases it turns out to be an important part of the programme. It is true that he or his associates go into different classes and give tests during a part of the day but the nature of these tests is very unscientific and hence untrustworthy. In short, the same old routine that existed fifty years ago persists even in the year of grace one thousand nine hundred and fifty-six. It is certainly a fact that a heap of correspondence passes from one office to another everyday but guidance or inspiration are conspicuous by their absence.

Another tendency most noticeable in the administrative

personnel is the centralising of power in themselves so that it could be doled out to others according to the sweet will of the bosses. The latest fad in this respect is the nationalisation of books. It means the adoption of only one book in a subject for the whole State. This takes away the initiative from the hands of the headmasters and teachers who have to do the real job and face the music. We are strongly of the opinion that this practice will lead to a still further lowering down of the standards. This is so because competition, as a rule, leads to superior production and better quality of work and when one book has been selected for sole adoption any further attempt in the direction of producing a better book for that class in that subject can and will just be ruled out.

At this stage we might be accused of painting an unduly dark, ugly and repulsive picture of the *modus operandi* of the educational administrator in this country. Some people might even go a step further and accuse us of distortion of facts. But we are not guilty of any such act. We do not even for a moment mean to give the impression to the reader that the entire responsibility for this sorry and unproductive state of affairs rests on the shoulders of the educational administrator. There are many reasons for this and they are not far to seek. The educational administrator has in fact his own difficulties and dilemmas, limitations and restrictions. The first and foremost of these is the time that he has to spend in doing routine jobs. This is not an exaggeration but a fact that a majority of our educational administrators find themselves in a situation where they are so much involved in the performance of the routine duties inherent in the proverbial red tape that

they have no time or energy left in them for any academic work

Secondly, the recruitment of such officers, as a rule, is not very judicious. The exigencies of service are such that seniority in service is very often the sole criterion of appointment without any attention being paid to the fitness or suitability of the person for the job. It is not infrequent to see university professors of different subjects and scientists of international repute who know nothing about schools or school education being given senior supervisory or administrative posts. All the experience that they have in this sphere is either from their own schooling or from the schooling of their children if they happen to have some. It is impossible for such people to judge the work of a teacher or give him some guidance because they are not the least aware of the problems of teachers and of the methods of teaching in schools. Teaching in a college or in a university, it must be remembered, is quite a different matter than teaching in schools and does not provide adequate background for supervisory work. This is why a majority of the present incumbents cannot provide any inspiration or professional guidance to teachers—they may be superior in rank but they are not superior in technical knowledge or in teaching skill. This practice of “creating experts overnight” must, therefore, be stopped forthwith if any improvement is intended or desired in the existing standards.

This is not all. Another serious drawback in our system of educational administration is that the administrator is

supposed to examine the work of any and every subject teacher irrespective of his own interests and qualifications. Now only a fool will imagine that any individual, however highly qualified he may be, can be a specialist in all school subjects and thus in a position to set a test and a good test in any subject that is entrusted to him. But this is exactly as things are. Consequently the result is that if the inspector is a man of science the teachers in that subject have to bear the brunt of the inspection whereas the rest of them have an easy time. It is very strange indeed that the need of specialist inspectors has not been felt so far in this country and things have just drifted in the old, wooden, hum-drum manner. As such it is no wonder that the standards of inspection are low and the achievements in this sphere are barren, unprofitable and good for nothing. We, therefore, suggest with all the force at our command that this serious omission should be rectified and the gap which has existed for quite a long time in the annals of the educational administration of this country be filled up.

The appointment of specialist inspectors will also go a long way in providing a thinking centre for the department of administration which would in turn act as an experimental laboratory. It is this department which will act as the nerve-centre and raise the job of the educational administrator from the level of a mechanical routine and bring it to the level of a living and scientific study. It will also enable the administrators to realise the fundamental and profound fact that administration is only a means and

not an end and that it exists for the sole purpose of improving education and enabling it to realise its objectives in the best possible manner.

The thinking department of the administrative personnel should consist of specialists who should supplement the work of the general practitioners and help them not only in doing what they are doing but also in knowing what is worth knowing and doing what is worth doing besides showing the way in which it should be done. They should provide general guidance in the shape of bulletins, journals, refresher courses, seminars, etc., besides carrying on research in their own special fields and supplying all information to teachers and others that they may stand in need of. This set of workers should be absolved of all non-academic type of work so that their time is not wasted and their energies unduly sapped and unprofitably employed.

The specialist inspector should, however, bear one thing in mind. He should remember that educational administrator does not function in a vacuum but it functions in a multitude of social forces which constantly act and react on one another. He should, therefore, take all the relevant facts into consideration before arriving at some decision. He should not be a mere arm-chair theorist but a practical field-worker—his philosophy being that of a pragmatist and not that of an idealist.

Finally, the facilities for the training of educational administrators and supervisors are few and far between. Very few universities in this country have any special courses

for this purpose and the Bachelor of Teaching or the more frequent the Bachelor of Education Degree is regarded as sufficient for the job. It clearly shows that the importance of effective supervision and administration in the day to day work of schools has not yet been realised in our country. In view of the absence of such facilities our administrators cannot acquire the technical tools of the craft and are bound to follow empirical methods and depend on pure, unadulterated *hunch*. In order to appraise the problem properly and see it in its true perspective and as a whole, an educational administrator must make a special study of the sciences of Education, Psychology, Sociology, Human Relationship, Economics, Political Science and Anthropology. It is only this broad-based knowledge which will enable the administrator to inquire into the problems in a scientific manner and give him necessary efficiency and qualifications to discover solutions to these problems. It is, therefore, suggested that special courses for this branch of knowledge be instituted in different universities so that a new generation of educational administrators and supervisors may arise from them. It is only a new generation of supervisors and administrators that will succeed in changing and modifying the old and wooden concept of administration and revolutionising its functions and scope. Poorly equipped supervisors and administrators are bound to meet with failure and will never be able to bring about this new outlook.

Affairs in case of managing bodies and school boards of denominational institutions are even darker and more dismal

than those depicted in the above paragraphs. The members of these boards or committees include a number of such people who have some money and command some local influence but have absolutely no educational background or training. There are no legally prescribed qualifications for the membership of such boards and consequently any person who is successful in any field whatever has the right to be elected to such bodies. He may be absolutely illiterate and unable to sign even his own name but by virtue of his being on the school board he automatically becomes an expert on all educational matters. As a result of the power and authority that such members wield by virtue of the office they hold they have been guilty of stupid and idiotic suggestions.

It might be interesting at this stage to refer to a couple of rare gems of wisdom or counsels of perfection which the members of such bodies or committees are reported to have given for improvement, betterment, and advancement of the work of the institution entrusted to their charge. In one case a member is stated to have raised the question of payment of salaries to teachers for Sundays and other off days. He could not understand or appreciate, in spite of the best efforts of some of the other members, the *rationalité* of engaging the teaching personnel during the long vacation. In another case the Secretary of a School Board ordered the Headmaster to dispose of the entire stock of books in the school library. He said, "Why should we buy books for them, they should do it on their own." But the decision of another Board is the limit. This Board consisted of members from two towns—the distance between them being five or six miles. They managed one high school which was naturally

built up in one of the towns. When the question of building the hostel came up for discussion the residents of the other town said as one man, "You have the school in your town, we must have the hostel in our town."

These instances may be regarded by some of our readers as extreme instances. They may be extreme but they have happened nevertheless, and tend to serve as a pointer to the kind and extent of the problems presented. Apart from these the appointment of teachers and their confirmations or dismissals are made not on academic grounds but on "other" reasons. The only way to please such non-academic people is through private and personal service and not through good, efficient and devoted work in the school. With a view to safeguarding the recurrence of such wrong and harmful acts we suggest that some minimum qualifications be prescribed for the membership of school boards and committees and a certain percentage should consist of those actually connected with Education in some form or another—teachers, educational supervisors, educational administrators and the like. This preservice education will go a long way in enabling them to realise the principles underlying educational problems, hold the scale even and give everyone his due. A further safeguard in this connection would be provided by the in-service growth of these members. This end could be achieved by affording them library facilities in abundance, instituting special meetings other than routine meetings to consider educational problems and by organising short courses and arranging visits and conferences for the mutual benefit of members of different School Boards. This three-fold programme for

the training of School Board members has been suggested by C. Grieder¹. W. E. Rosenstangel², on the other hand, regards the National State and Regional School Board Association as the most useful means for the same purpose. He says:—

“This association offers an excellent opportunity for an in-service training programme for school-board members. This is especially true if the association follows the practice of holding the state and district meetings. These meetings in many states are becoming more and more instructional in board of education work. In other words efforts are now being made to educate the board members on specific school board problems instead of always trying to unite the members into a pressure group. It is realised there has been and will be need for the association to exert pressure for better educational facilities for youth.”

Before closing this discussion it seems desirable to say a few words about our headmasters as they are the most effective links in any system of educational administration. In the words of Percival Wren³, “What the mainspring is to the watch, the fly-wheel to the machine, or the engines to the steamship, the headmaster is to the school.” He continues, “Schools are good or bad, in a healthy or unhealthy mental, moral and physical condition, flourishing or perishing as the

1. Grieder, C., *Methods used to train School Board Members*, *School Executive*, Vol. 66, August, 1947, pp. 43—44.

2. Rosenstangel, W.E., *In-service Training of School Board Members*, *American School Board Journal*, Vol. 3, July, 1945, p. 24.

3. Wren, Percival, *Indian School Organisation*, Longmans, Green and Co. Ltd., Bombay, 1941, p.3.

headmaster is capable, energetic, and of high ideals, or the reverse. Great headmasters make great schools, and schools rise to fame or sink to obscurity as greater or lesser headmasters have charge of them. The character of the school reflects and proclaims the professional character of the headmaster. He is the seal and his school is the wax; and few men have higher duties and responsibilities than the headmaster."

The importance of the headmaster, therefore, cannot be over-emphasised. He is the teacher of teachers, the supervisor of supervisors and the administrator of administrators. But in order to carry out his duties effectively and efficiently he should regard himself as a leader—and not as a dictator. He should strive to achieve the ideal that we have stressed above for an educational administrator—the ideal of the educational statesman. He should, therefore, share the responsibility of the school plant with his teachers and the headmaster and the staff should pull together to find solutions of the problems of the school. He should look upon the school plant as a cooperative enterprise and not as "personal property", as some headmasters are inclined to do. If ever a need arises when he has to do something contrary to the advice of his colleagues, he should be extremely tactful in not overriding their decision by a stroke of pen or a word of command. If there is an occasion to appeal to their motives, he should try to appeal to their highest motives. The kind of headmaster who says to a member of his staff, "Do this and I will make a special mention of it in the

annual report," is appealing only to the baser motives and he will never be able to develop a high sense of professional ethics in the members of his staff.

A headmaster must understand very clearly that his main job is not merely to sit in the office and carry on his work but he should also be on his legs and observe classes at work with the primary object of co-ordinating teaching methods practised by the various teachers and improve upon them. He should, by means of personal observations, be in a position to make proper assignments of work and distribute "extra" duties. He should be fully familiar with the personal circumstances of each teacher, his strong points and his weak points, his needs and his requirements. It is only this knowledge which will enable him to allocate such duties to them as will bring out their interests and enable them to show their best. Informal staff meetings will go a long way in this direction and we, therefore, suggest that they should be held every week. It is absolutely wrong to go to a staff meeting with the sole idea of getting a stamp of the staff approval on pre-arranged decisions and ideas—the decisions should always be based on the discussions in the staff meetings. Further, to give the meetings an informal social atmosphere, it will be better to discuss matters over a cup of tea—a convenient workable practice in this respect would be to make it a contributory affair. The headmaster, should, however, on some occasions foot the bill himself—such occasions should, however, not be so frequent as to become a burden on the headmaster or to result in financial embarrassments of any kind whatever.

A headmaster's relations with the community must also be pleasant. He should know his community especially the parents well. He must also keep them well-informed about the activities and work of the school. Visits from parents and others interested in the work of the school should not only be welcomed but encouraged. The appointment of a social worker on the staff of a school will be very useful in this regard. In case it is not possible to appoint a whole-time worker, the work should be assigned to an ordinary member of the staff so that the headmaster may be in a position to make an effective job of it. But it should be noted that the teacher concerned should not be over-burdened in any way; otherwise the efficiency will suffer and the efforts will not bear much fruit.

Some headmasters feel that they are "detectives" and their main task is to detect the weaknesses and failures of others. This is an absolutely erroneous conception of the headmaster's job and should be let alone. A headmaster should try to find out what a man is most suitable for and how his weaknesses can be removed. He should not resort to finding out what a teacher has done by privately interrogating the pupils about it. He should, as has been suggested above, visit the classes, see things for himself and discuss things with the teachers concerned in a calm manner and in a spirit of cooperation. As such the headmaster has to be a very social and sincere person. He has to be a broad-minded, professional enthusiast having an open mind. Moreover, he should not be inaccessible or unapproachable but be readily available for assistance and advice.

Bray¹, while discussing the qualities of a headmaster, has grouped together a number of points which every headmaster should possess. These qualities are as follows :—

1. Lofty sense of duty;
2. Broad sympathy;
3. Sound judgment;
4. Power of insight into character;
5. Love of his work;
6. Originality of initiative, and belief in "the cultural law of progress";
7. Self-control;
8. Organising power;
9. Firmness;
10. Persuasive powers of speech;
11. General purity of character; and
12. Ability to breathe the spirit of it into the school.

This array of qualities may be regarded as ideal but it should not be forgotten that every headmaster, as Bray points out, "worthy of the name is generally regarded by his scholars as an ideal personality possessing extraordinary knowledge and gifted, too, beyond the run of ordinary mortals." Every headmaster should, therefore, strain every nerve and exercise the greatest care, vigilance and circumspection to keep the scholar's ideal unsoiled, unsullied, unshattered and untainted.

We have in the foregoing pages made an attempt to inquire and investigate into the role of the educational administrator and provide a glimpse of the numerous duties and

¹ Bray, S. E., *School Organisation*, University Tutorial Press, London, 1924, p. 238.

manifold responsibilities that he has to fulfil. We have also tried to depict the conditions as they exist to-day and have made suggestions for improvement. It should, however, be carefully borne in mind that no reform worth the name will be possible in the existing state of affairs unless we recruit people of the proper type who will make educational administration vital and inspire new life into it. We must, therefore, recognise the importance of experts and discard the old belief that "in education alone to have had neither training nor experience is no bar to being an authority." Even in cases of these experts, it should be remembered, pre-service education and training will not suffice by themselves—the in-service development must be assured and made a reality. Those at the top of the administrative hierarchy shall, however, have to depend on their own initiative and resources with a view to providing for their own growth. Unless they help themselves to constant growth, which is a continuous affair, their efforts in stimulating and inspiring others in this direction will be of no avail.

The watchwords of growth and development are variety and variation and they are associated with new efforts, new views, and a constant changing and modification of plans to suit new conditions. Playing the part of an "overseer," therefore, and just "checking off" other people are not the business of the administrator of tomorrow. He regards autocracy as an outmoded institution and adopts the democratic way of life because it is the best type of government for individual growth, development and emancipation. By adopting this policy, he becomes aware of the powers of group

thinking and collective action and brings home to others the satisfying effects of democratic human relationships. He gives up the time-old traditions of checking his teachers, frightening his teachers, weakening his teachers, and examining them; but manipulates things so as to train his teachers, inspire his teachers, encourage his teachers, and trust them. In this way he will not only create an excellent professional *morale* among the teaching staff but will also cultivate a vital interest in them for educational philosophy so that they can continually test and retest their plans and purposes, ideas and ideals, methods and procedures, systems and organisations.

Chapter IV

Discipline

EDUCATIONAL institutions in our country have seen a general all-round deterioration in discipline during recent years. In some of the universities especially things have degenerated to such an extent that the situation is considered as alarming. It is, therefore, imperative that urgent and immediate steps are taken to mend and reform the situation and remove the canker of indiscipline from our midst, otherwise the entire pattern of our society stands in constant jeopardy. "Have we to accept as normal the utter lack of discipline among the students?" asks Pandit Nehru. "The leaders of India of tomorrow will come out of the students of today," continues he and says, "what kind of leadership are we going to have in that tomorrow if their training in the present is going to pieces?"

This problem of indiscipline, it must be pointed out, is not peculiar to our country alone. It is in fact a worldwide phenomenon because the sun, it has been said, never sets on the problems of conduct. Every country and every institution faces these problems at one time or another—some tackle them successfully, others make a mess of them. There is, however, a difference in the degree and acuteness of the problem in different institutions at different times and in different regions and different countries. And our misfortune is that the problem in our country has recently taken a turn for the worse. The whole situation, therefore, is embarrassing and intractable.

But whatever the magnitude and the immensity of the

problem may be, it cannot be denied that we are all concerned with and are all to blame for this sad and unhappy state of affairs. This raises extremely vital and far reaching issues, and it is for the teachers in general and educationists in particular to deal with them effectively and adequately. We cannot afford to watch listlessly, inertly or with indifference this utter demoralisation and degeneration of our education.

Apart from other reasons which may be given for this extremely bitter, wretched and unenviable state of affairs, one of the most important reasons is that we in this country have been under a foreign yoke for quite a long spell of time. The rulers, in their own interest, used coercive and negative methods to keep order in the country. We obeyed the rules framed by the foreign government not because of any respect for law but for fear of punishment and as such we lost our sense of mutual regard, social participation and the obeying of law for the sake of respect that it commands, mutual benefit that it bestows and social progress that it ensures

The struggle for freedom, moreover, in most of the cases was nothing but defiance of law and authority. Students were asked to leave their schools and colleges and take part in all kinds of agitation with a view to furthering the struggle for national emancipation. These efforts bore fruit and we achieved freedom, rather earlier than expected by many. As a result of it, rules and restrictions became fewer and we felt like free men, free to do anything. The same leaders who used to preach disobedience of law and authority became the government.

Some of us, therefore, naturally took Swaraj as licence and

confused it with power to do anything unmindful of its consequences. People of this category clean forgot that Swaraj is not a release but a responsibility and that it implies greater restraint and more self-control than ever demanded by the conditions in the past.

This mistaken belief of Swaraj, however, cannot be changed overnight. It will take us some time before we realise our new role and prepare ourselves to live up to it. Besides it will take some time for us to realise that what was right then is not only wrong, distracted and distraught but positively harmful, now. With a view to retrieving our position, therefore, we have to forget the lessons of the old and learn anew. This applies not only to the student community but also to the fraternity of teachers especially those teachers who belong to the old school and believe in curbing freedom in and out of season and imposing restraints without rhyme or reason.

The exploitation of students by political parties has done irreparable harm to the cause of discipline in our schools and colleges. Commenting on this cause, the Randhir Singh Committee, which was recently appointed by the Vice Chancellor of the Allahabad University to enquire into the causes of indiscipline prevailing in that place of learning, has suggested that political parties should withdraw from the sphere of university life in the larger interests of the country. It has also proposed that politicians should enter into a kind of gentleman's agreement, voluntarily undertaking not to exploit students for party ends. The suggestion, it cannot

be denied, is remarkably sound but we have our doubts if the self-abdication expected of the different parties and politicians will be forthcoming. These politicians have used the students for furthering their own ends and having tasted blood on many occasions in the past, it is too much of a pious hope to expect that they would turn 'vegetarians' and lose their power, prestige and influence.

Among other causes of indiscipline, the abnormal rise in numbers without a corresponding increase in the staff, accommodation and equipment, is the most outstanding. In our educational institutions the rise in numbers has been phenomenal and the teacher-pupil ratio in certain cases stands at 1:50 whereas in the old universities of Oxford and Cambridge it is never higher than 1:8. Consequently the personal relationship between the teachers and the taught remains a thing of the past—most of the teachers believing that they have only been "hired" to teach. With large numbers, friendly cooperation and sympathetic understanding are not possible and teachers, as a rule, do not have any genuine interest in the welfare of their students. This is why the teachers of today have lost their hold on the student community in general and have failed to mould the pattern of student thought both in the class-room and outside. Some of them have even begun to feel that they have nothing to do with the well-being and welfare of their students, they have only to teach a particular subject on fixed days and fixed hours.

The Randhir Singh Committee has also drawn the attention of the Vice Chancellor to the teacher-politicians

or politician-teachers—teachers who have one foot in educational institutions and the other in legislative chambers. In their attempts to do two jobs at a time, they are not able to do either satisfactorily. As such they set a bad example—bad both for the students and for their colleagues. As a remedial measure, the Committee has suggested that teachers should, be debarred from contesting legislative elections except from seats that are specially reserved for them and they should, on no account, hold offices in the organisation of a political party. This suggestion, we hope, will go a long way in ridding our educational institutions of the baneful effects of politics and improve the quality of work of our teachers.

Among other causes responsible for indiscipline may be counted the waning of home influence, frustration due to unemployment, absence of moral instruction in the different stages of education especially the initial stages, lack of proper facilities for engaging students in healthy activities outside the class-room, baneful effects of unwholesome pictures, laxity in administration and absence of co-education.

In our attempts to resolve the problem of indiscipline we have to consider the very purpose for which education is imparted. It is said to be a "preparation for life" or to use Herbert Spencer's words, it is for "complete living". Voices may be raised against a total acceptance of these aims, and we are conscious of the criticisms that have been levelled against them, but it cannot be denied that the idea contained in these statements is very significant and must form an essential ingredient of any purpose or purposes that may be assigned

to education. In fact no society can progress unless its individual members have been prepared for the life they have to lead and given adequate and suitable training in disciplined living. It, indeed, is the *sine qua non* of any progressive society and by training children in the art of disciplined living, the teacher certainly makes a solid and signal contribution to the welfare of his community and his state. This is so because no society can exist and no state can run unless every individual member composing it learns to analyse the social situation he is placed in and to modify his conduct so as to fit the same in that social pattern. A machine can run smoothly only if every part fits in where it belongs. It is only this realisation that needs to be created and the rest will follow as a natural consequence. But this realisation, it must be borne in mind, can only be an inborn process and not an imposition from without.

As such discipline becomes an essential part and parcel of all human associations and may be better termed as social discipline. We are, however, constrained to point out that a vast majority of our teachers in schools and colleges does not realise this aspect of discipline at all. They neither see nor appreciate its constructive aspects and its educative possibilities. They also fail to realise that the problem of discipline is essentially concerned with a person's feelings and emotions. It is, therefore, not only wrong but definitely harmful to limit class-room discipline to a correction of wrong or undesirable conduct only. Discipline must carry out into life of which the class-room or the school is a mere microcosm.

Taking all that has been said above into consideration, it might be affirmed that discipline, if it is to further its own cause, must be positive and not negative, it must be constructive and not destructive, it must be suggestive and not prescriptive, it must be indirect and not direct and lastly, it must be remote and not immediate. Positive, constructive, suggestive, indirect and remote discipline seeks to create in the pupils wholesome ideas and ideals and healthy and desirable attitudes and habits and it accomplishes this through the effective agency of the class-room, study periods, hobbies, leisure-time pursuits, and other co-curricular or extra-curricular activities. In this way it touches the inner springs of thought and conduct and develops self-control which in turn protects the individual from the tyranny of his own lower desires and passions by appealing to the highest level of conduct—the ethical level.

Negative, destructive, prescriptive, direct and immediate discipline, on the other hand, seeks to administer laws and wield its authority by resorting to repressive and suppressive measures. It believes in correcting the wrong conduct or misdemeanours on the part of a pupil by means of unquestioned obedience to the will of the teacher. Instead of appealing to the higher levels of conduct, this form of discipline makes use of the fear motive—fear of punishment. It does not tolerate any deviation whatever from the prescribed code of conduct, but uniformity of procedure and subservience to commands are its watchwords. It, therefore, strives to secure and spread goodness by proscribing and suppressing wrong, undesirable and harmful conduct. It is certainly true that occasions do arise

some time or other for such eventualities but to make this type of discipline as the very ideal will defeat its very purpose. Even in such cases when this type of correction alone seems to be effective, it is suggested that its tools, detentions, rebukes, punishments, withdrawals of privileges and the like should be used with the sole and specific purpose of making them an auxiliary to the positive type of discipline. It is so because true discipline is essentially creative and unless it creates an atmosphere of mutual regard and self-restraint no progress or advancement is ever possible.

It has been stated above that the right type of discipline touches the inner springs of thought and conduct and develops self-restraint and self-control which in turn protect the individual from all sorts of misconduct, misbehaviour and misdemeanours, and they accomplish this by appealing to the highest level of conduct—the ethical level. The individual in such cases refrains from doing a wrong act not because he is afraid of some rule, law or punishment but because his inner conscience disapproves of that act and overrides the lower desires and passions. It is, therefore, necessary for us to understand once for all the fundamental fact that the problem of discipline can be tackled successfully only if our education helps to build the character of young men and young women. It should be realised more than ever today that the formation of character is the real goal of an educational effort and the real touchstone of its success or otherwise. As such our schools and other educational institutions must exist, if they at all exist, for the training of character and not merely for

the learning of text-books, memorisation of lessons and passing of examinations.

What has been said above is a counsel of perfection but it does not cut much ice because it leaves a field worker where he is, it does not unfold or unravel any ready-made formulae or tricks of trade to be made use of in time of need. Besides, the concept of character itself has varied with different peoples and in different ages. It is in fact one of those words which is a delight to the sophist but a despair of the thinker.

We, on our part, are conscious of this difficulty. But there is certainly a large common measure in regard to qualities which has persisted in all times and in all climes. There is, therefore, no need whatever for us to delve deep into the meanings of this word. Talking in general terms, therefore, we might say that good character which is an essential part of good citizenship consists of the following traits :—

1. Self-control and obedience.
2. Honesty.
3. Courtesy and consideration.
4. Co-operation.
5. Helpful initiative and perseverance.
6. Promptness.
7. Orderliness.
8. Putting others before self.

The training of character, therefore, implies that schools, colleges and other educational institutions must work towards

the cultivation of the above qualities. But it should not be forgotten that training in individual qualities or virtues is not the same thing as training in character. As G. A. Coe has pointed out, individual virtues as bravery, fidelity and honesty apply as well among a band of robbers as among a group of law-abiding citizens. The distinction between the two must, therefore, be clearly understood. Along with this distinction, it should also be carefully borne in mind that our purpose cannot be achieved by mere theorising or by mere indulging in idle hypothetisation. Even mechanical repetition under threat of punishment will not lead us anywhere near our goal. The need of the hour, therefore, is to revise the working and organisations of our schools and colleges in such a way that they will develop in the pupil an integrated personality which consists of "organised ideas, attitudes, traits and habits which an individual has built up into roles for dealing with others and himself." This kind of personality, it should be remembered, cannot develop in a vacuum but grows out of real participation in the social life of the school and the community. When looked at from this point of view, discipline in schools and colleges does not remain a problem for the class-room alone but envelops the entire life of the child and becomes co-extensive with living.

Before bringing out the practical outcome of the above discussion it must be pointed out that the methods adopted or followed for the purpose of inculcating the right type of discipline are not to be confused with mere policing. The line between the two must be drawn very carefully and it should be remembered that discipline develops best in a free

atmosphere. Freedom, moreover, does not mean freedom for only an individual or for a group but it means freedom for all. It should, therefore, be recognised that freedom will not be real freedom if its enjoyment by an individual deprives somebody else of his or her freedom. Consequently there is no such thing as absolute freedom—freedom is always relative and invariably implies some restraints or restrictions. It is, therefore, wrong to suppose that the terms freedom and discipline are contradictory. They are different sides of the same coin. This is so because that discipline which takes effect voluntarily is tantamount to freedom; and that freedom which gives up its rights in view of the inner voice or self-imposed restrictions is discipline. Freedom, therefore, always means disciplined freedom and likewise discipline is of the highest type when it is free discipline. Thus good discipline is always self-discipline and implies self-control which is self-imposed and self-commanded. A good and well disciplined citizen is, therefore, he who obeys orders and commands and respects law not because of any alien authority but because he recognises the good that will come out of such obedience.

The question now arises as to how we can produce such results. What methods should we follow, what activities should we introduce and what kind of organisation should we follow with a view to achieving best results in the minimum of time? In the programme of opportunities that should be provided for the purpose two principles are of utmost importance and they must come before everything else. The first principle in this respect is that school organisation and

control should not be the sole province of the head of the institution or that of the members of the staff either but students should invariably be associated with them in all the different aspects thereof. Secondly, hobbies, leisure-time pursuits and extra-curricular activities should be so numerous and so organised as to appeal to the tastes and temperaments of all pupils besides giving them a lot of experience in managing them on their own.

The principle of student participation is based on the psychological dictum that "there is no age at which children may not be held at least partially responsible for their own conduct." Even a small child can be held responsible for sharing some responsibilities especially those which are directed towards his own emancipation. Furthermore, we have to bear in mind the fact that we live in an age of democracy and as a natural consequence of this fact it is imperative for us to provide opportunities to our pupils in sufficient numbers to engage in co-operative activities and thus socialize themselves. They must learn to work in cooperation with others and imbibe, at as early an age as possible, those ideas and ideals that will enable them to become active and effective members of a democracy. Moreover, by taking part in the organisation of the school and its activities, they will not feel that they are mere cogs in the wheels of the school plant but they will come to regard themselves as vital parts of the school society which represents on a smaller scale, of course, the broader society of which the child is a member.

Student participation, moreover, is primarily meant to stimulate a sense of individual and group moral responsibility.

It thus seeks to develop initiative, judgment and leadership in children. It also gives practice in administering social machinery. And last but certainly not the least, student participation improves teacher-pupil relationship and gives birth to a healthy school spirit which will animate the school as a whole and which in turn will have greater influence on discipline than mere discipline will or can ever have on school spirit.

The details of student participation in different institutions will not be exactly similar. Their nature and their extent will differ from school to school in accordance with the prevailing conditions, circumstances, demands and requirements of the society around, on the one hand, and the mental calibre, previous experience and interests of the student community, on the other. The exact nature and extent of student participation in school activities, therefore, cannot be fixed in an arbitrary manner but must be decided upon by taking all the factors mentioned above into consideration. But we should not be oblivious to the important fact that all such programmes must have personal as well as group aspects. Various items of activity may be suggested where the students may participate effectively. Sanitation and cleanliness of class-rooms and school premises, framing of rules and regulations for compliance by students, organisation of student courts and juries are some examples of these activities. In its purest form, student participation means the same thing as self-government—government of the students for the students by the students. It, however, should not be considered as complete

surrender. There are degrees of self-government as there are degrees of student participation. But whatever the extent to which self-government is introduced in a school, it should, under no circumstances whatever, be undertaken solely in a spirit of play. Power passed on to the students must be real power and it must be transferred gradually in reasonable measures. It should not be thrust on children but should be the outcome of a free expression of the common will of the student community, on the one hand, and of the staff, on the other. In this connection it is important to bear in mind one important principle and that is that if either the teachers or the pupils feel that the power has only been lent to them, the proposition will never bear any fruit and is bound to prove abortive. In respect of student participation, therefore, the teachers of yesterday have to change their attitudes and frames of mind, otherwise there is no hope for the suggestions made in the above paragraphs.

The second principle that we have suggested above is the provision of hobbies, leisure-time pursuits and extra-curricular activities. The inclusion of these activities in the work of schools, colleges and other educational institutions will go a long way in providing opportunities for training in discipline. This is so because education has to perform the dual task of providing for livelihood and for leisure. If it fails in its tasks, it results in and leads to serious injury of mind, body and character. Moreover, it must be borne in mind that extra-curricular activities are "organised phases of student life where conduct is more conspicuous than knowledge." As

such they play a very important role in controlling the inner springs of conduct and in guiding the actions of an individual. But in order to get maximum benefit from these activities, the following points must be carefully noted and strictly acted upon.

The first of these points is that the number of activities provided in a school or a college must be many and varied. It is only then that they can appeal to the interests, aptitudes and abilities of different pupils and help in the realisation of the aims stated above. Moreover, they can lead to the enrichment of personality only if the students pursuing them are genuinely interested in them ; otherwise, they are looked upon as mere impositions or inflictions from above and consequently they are bound to defeat their own purpose.

Secondly, these activities must be conducted in a manner which is most conducive to the development of character. This can be achieved by defining the aim or aims of each activity in clear, specific and unambiguous terms; permitting pupils to make their own plans and learn by experience; entrusting their organisation to the members themselves instead of vesting the entire authority in the teacher alone; and making provisions for them in the regular school hours instead of regarding them as mere "tags" or "extras" which have to be carried on in extra time.

As a corollary to the above suggestions it should be noted that these activities should not be restricted to the provision of evening games only—and even these for a few would-be show-men or gladiators. This would be a complete negation

of what we are advocating. In addition to the different clubs like cricket club, hockey club, football club, kabaddi club, gatka club, and so on, provision should be made for debating society, old boys club, dramatic club, scouts club, girl guides club, music club, school journey club, holiday club, naturalists' club, study circle, N. C. C., festivals committee, guild of courtesy, league of mercy, book club, safety club, social service league, art club, photographic club, gardening club, cycle club, cooperative society, junior red cross and students' magazine. It is not suggested for a moment that every school should make provision for all these and these alone. What is implied is that every school should provide a host of such activities depending upon the initiative, interests and enthusiasm of the teachers on the one hand and the needs, demands and stage of development of the pupils on the other. Besides, it is imperative that they should be carried on in such a manner as to increase manifold the school's opportunities for doing good by enabling the students to take upon themselves corporate and social duties which in turn will lead to a socialising of the members and have a humanistic and civilising influence on them in general.

Before closing this discussion, it seems necessary to say something about another aspect of discipline, discipline in the sense of maintaining order, which in the past used to be the teacher's only concern. In this sense discipline, as a rule, was of a stern, severe, negative and narrow type and concerned itself entirely with misconduct, misbehaviour and misdemeanour in the class-room, in the playing fields and elsewhere. Not long ago discipline in the sense of order and

strict conformity to set procedures used to be regarded as the first requisite and the foremost law of the school and it is a sad commentary that conditions in this respect in our schools have not improved much. Even today, in most of our schools, discipline is nothing but detection of misbehaviour in and outside the class-room and infliction of punishment as a remedial measure thereof.

This is, however, an old story and conditions must change. It is true that order is necessary for class-work and nothing worthwhile can be done in the class-room or outside in its absence. But it should be regarded as incidental to class-room work instead of being considered as the end and be all of discipline. Wrong doing on the part of the pupils, it must be carefully borne in mind, is not always due to wilful intention on their part. It may be due to some misunderstanding on the part of a pupil or to a lack of proper or adequate knowledge. In certain other cases the entire responsibility for it may be that of the teacher and not that of the pupil. Bad teaching, for example, invariably leads to poor and ineffective discipline. Besides, inactivity, fatigue and boredom also create disciplinary difficulties. This is not all. Misdirected energy, whether deficient or surplus, lack of legitimate outlet, resentment against improper control, bad physical conditions, undue egotism, low mentality, desire for sensationalism, misadventure and malice, besides a host of other factors, all breed problems of discipline and the responsibility for their causes cannot be ascribed entirely to the pupils.

There is another point which merits serious and active consideration on the part of every teacher. When considering wrong actions and other problems of conduct or misconduct, the teacher should not be satisfied with only a superficial study of the case but should make a serious effort and an earnest attempt to discover the real cause of misconduct or misdemeanour and remove it. Treating the symptoms only and improving the outward behaviour without affecting the inward springs of action will not yield effective, lasting and permanent results. He should, therefore, regard each case of misconduct as a problem to be studied and not as a situation to be met and this study of the problem should be carried on in a most sympathetic manner. Prescribing the same kind of punishment for the same kind of fault in different individuals will not be very effective or go very far in most of the cases. It has also to be remembered, as stated above, that there will be certain problems that arise out of the teacher's own personality or quality of teaching and they can best be solved by the teacher himself through self-analysis, self-correction and self-improvement. This end can be achieved only if the teacher develops a proper and healthy attitude towards himself, towards his work and towards his pupils. He should not do things in a half-hearted manner but should come thoroughly prepared to the class with his lessons and cultivate a genuine interest in the work entrusted to him. He should try to create interest in the minds of his pupils and arouse their curiosity in regard to the work in hand by means of questions, descriptions, illustrations, references

and a greater and wider use of teaching aids. In short, he should strain every nerve to motivate his pupils properly to a high pitch. As a result of this he will find that most of the disciplinary difficulties and problems will just vanish into thin air. This is so because an active, interested and properly motivated pupil is so much absorbed in his work that he has no time to think of acts of misconduct and misbehaviour--much less be guilty of doing them.

In addition to this, a good teacher should be conscious of improving conditions in such a manner that the results are not only effective but also permanent. In this respect it has to be carefully borne in mind that the discipline that goes under the name of military discipline, though helpful in creating calm and quiet temporarily in the class-room or outside as the case may be, brings about no permanent results. This is so because it appeals to the lower motives instead of appealing to the higher motives of conduct. There are direct as well as indirect means of control and the indirect methods are always to be preferred because they bring about permanent results. They certainly take longer in some cases to produce results but it does not matter. If a teacher finds himself resorting again and again to direct means, there is something fundamentally wrong with him, or with the pupil or with the entire school plant.

In order to give a practical shape to these principles, devices, dictums or "tricks of trade" effectively, a teacher will have to know his pupils and have an insight into their attitudes, aptitudes, likes and dislikes. He will have to see that

his work suits the individual capacities and capabilities of his pupils and that he is not in any way forcing the dullard too fast or withholding the intelligent unduly behind. Even such small things as the learning of their names, readjustments of their seats, assignment of their duties in keeping with their mental make-up and approaching them on a personal level, instead of dealing with them *en masse* as a herd of cattle, will go a long way in enabling him to win over their willing cooperation and putting in their very best with a view to furthering the activities of the school and fulfilling its purposes.

While concluding it may also be desirable to comment on the role of rewards and punishments in the educative process. Although in an ideal state of affairs both rewards and punishments have no place, in actual practice however, it is impossible to totally dispense with them. The need, therefore, is that the teacher should learn the art of using them in such a manner as to be most effective and be beneficial both to the educative process and to the aim of discipline that we have outlined in the above pages. Meticulous care should, therefore, be taken to see that rewards do not swell the heads of those who win them and punishments do not make the pupils rebellious against authority by being too frequent or too severe. This end can be achieved by reducing the number of rewards and making them relatively difficult of attainment, sustained effort being considered more important than one solitary attempt. Similarly it should be borne in mind that punishment is an evil thing in itself and should, therefore, be avoided. But like a surgeon's knife it may, at times, be necessary. Such

occasions, however, should be very rare and corporal punishment should be eschewed once for all from our institutions. There is nothing more disgraceful than this, both to the person who gives it and to the person who receives it.

In conclusion we have to remark that the problem of discipline is the problem of problems and bristles with many difficulties. To a cursory observer it even baffles solution but the imperative and immediate urgency of solving it cannot be challenged. This it must, however, be pointed out cannot be accomplished in its entirety by any individual or any institution only by its own efforts. In the words of the Report of the University Education Commission (1949), "Administrators and teachers cannot solve satisfactorily the problems of promoting good life and high ethical standards on campuses. They must have the co-operation of the parents, the political leaders, the public and the press. This is a co-operative task which deserves the support of all good citizens. The outcome is significant not only for higher education but for the sound growth of our country."¹ We sincerely hope that this co-operative nature of the problem is realised by the inhabitants of this vast country as a whole in general and the teachers and the pupils in particular and efforts commensurate with the urgency and the magnitude of the problem are put in by one and all, so as to remove the canker of indiscipline which has been responsible for the demoralisation and degeneration of our education and has acted as an insurmountable obstacle in the achievement of progress and prosperity.

1. *The Report of the University Education Commission*, Ministry of Education, Govt. of India, 1949, p. 385.

Chapter V

Curriculum

ONE of the most important, if not the most important, items in the educative process is the curriculum or the content of education. This is so, because without first deciding what to teach, it is idle to talk of how or when to teach. It is in fact the fundamental problem which determines the warp and woof of the process of education. This point was very ably brought out in one of the leading articles of the Times Educational Supplement wherein it was stated as follows :—

“Curricular Reform should be the keystone of our plans for post-war reconstruction. No considered judgment concerning the recruitment and training of teachers can be reached unless we know the kinds of service teachers will be expected to undertake. Estimates of the cost of a post-war building programme, of the time this will take, the labour it will absorb, or the materials it will consume, are quite valueless unless we have a clear idea of what sort of buildings will be required, and that can only be determined when we have settled the types of activities to be carried on in them.”¹

The determination of curriculum, therefore, is regarded as a vital job in any educational venture. It is the vehicle whereby and through which the pupils make an effort to achieve the objectives of education. Besides, it acts as the pivot in organising educational effort on some manageable basis and is undoubtedly the heart of the school and all that goes with it.

1. *The Times Educational Supplement*, July 11, 1942.

The present curriculum in this country, or for that purpose in any other country, is a result of the process of accretion and the fundamental principle which determined it from time to time was the principle of equipment—the desire on the parts of the adults to “fashion the child after their own image.” The adults supposed that they were well-acquainted with the needs and the requirements of the future and so they included such things in the curriculum as would enable the children to acquire proficiency in the things which may some day be required. When life was simple and living in society was not a complicated affair, the utility of only one R was recognised and regarded as enough. This was the art of reading and it was the means to acquire a knowledge of the holy books. Gradually the remaining two R's were also brought in because the changed economic conditions demanded their inclusion.

This did not stop here. Other subjects were introduced in their turn—the underlying idea in every case being, as in the past, the “equipment” or “preparation” of the child for the supposed needs or requirements of the future. The Greek curriculum consisted of the seven Liberal Arts combining the Trivium and the Quadrivium; the Romans made one addition to it by including the study of Greek language also; the industrial revolution brought in the physical science; the humanistic realists were instrumental for the inclusion of modern languages, history and geography; the naturalists were responsible for the admission of physical education and finally the changed social outlook and requirements brought in

fine arts. In spite of all these additions to the growing list of subjects, still it was felt that there were some gaps in the proper "equipment" of the child and so another set of activities, popularly known as the extra-curricular activities, but in reality as curricular as any other set of activities, was introduced.

As a result of this process of accretion, the number of subjects in the curriculum went on multiplying and there came a time when growing like a snowball it became too populous and overcrowded with subjects. The critics were bitter against this overcrowding of the curriculum with one subject after another because it turned it into an "incubus." They, therefore, demanded the exclusion and rejection of some of them from the curriculum. But it is interesting to point out that once included they became established institutions and so nothing worthwhile was achieved in this connection. In so far as the criticisms against overcrowding were concerned they were brushed aside by the plea of mental discipline or transfer of training. This plea itself was an off-shoot of the faculty theory of psychology. It was argued that though certain subjects or portions thereof had absolutely no relevance to the life as it was being lived or would be lived in the modern world yet they were essential because they "exercised our imagination," "trained our reasoning," "developed our observation," "cultivated our memory" or, in short, "disciplined our minds."

The principle of "equipment" supplemented by that of the "transfer of training" leads us to a philosophy of the curriculum usually known as the "traditional curriculum

philosophy." According to this philosophy the curriculum is conceived in terms of subjects, each one of which is given a predesigned and predetermined place and allotted a fixed amount of time. In this way the exact and precise extent and scope of each subject which is to be studied in a particular class or in a particular academic session is carefully and strictly defined. This job, it must be realised, is not left to the will of the pupils but it is entrusted and is carried out by adults in terms of adult values. Emphasis is laid on learning and acquiring of habits and skills—they may not be and usually are not of any utility to the child in the period of life he is actually living or passing through but are supposed to be useful in adult life which will come later and for which he is being prepared.

The function of the teacher in such cases is to employ such methods as will enable him to communicate what he knows to his pupils. These teachers in fact are concerned primarily with what to teach and not with how to teach. Consequently they lay a good deal of stress on repetition and rote memory even though they might be lifeless and meaningless in most of the cases. Efforts are made regularly to measure effectiveness in teaching and examinations and tests abound. Moreover, the types of test or examination given for this purpose are, as a rule, tests of reproduction and memory. Individual differences are totally ignored and consequently the need for individual instruction is never felt. The teacher has faith in group teaching and he teaches a class—not pupils in a class. As such he is always sacrificing them *en masse* for the sake of the hypothetical average child in the class which unfortunately does not exist.

As stated above the curriculum according to the traditional philosophy is decided upon by adults keeping adult values in view. But these adults are not the teachers who have to face the music and carry out the actual job. They are the administrators and the supervisors or they belong to some other superior cadre of service or grade of authority. This practice of determining the curriculum by an alien authority makes things still worse because it is all imposed from above and the persons who have to carry out the instruction and the children for whom it is meant are both completely left out of the picture. Once made out, it is regarded more or less as a static, fixed and unchanging programme of studies and if any change or deviation is envisaged or suggested it has to be referred to the "demigods" who drafted it in the beginning.

This concept of the curriculum, we have to remind our readers, is the result of the traditional philosophy of education which regards education as static and something which takes place in one of the rooms of a specially designed institution for a fixed number of hours every day. It is supposed to start with the beginning of the school and stop when it closes for the day and is carried on without any reference to the community which created it or the natural life which surrounds it. According to this philosophy, therefore, being educated is synonymous with going to school. It is not looked upon as a life-long process but a process which, as stated above, continues for a fixed number of hours a day and lasts for a fixed number of years. Hence, education, the day

one leaves the school or a college is supposed to come to an end and one is considered to have acquired all that was necessary to prepare one for the life that is to be lived everafter.

As the traditional philosophy regards education as "preparation", it is usual to restrict it to words and symbols, and the acquiring of skills and techniques. Consequently, the curriculum becomes nothing but a body of factual principles and those essential skills and techniques which man has discovered and which are passed on to his children in a school through the processes of telling, explanation, exposition and repetition—better termed as the process of education.

As depicted above the static concept of the curriculum is the result of the traditional philosophy of education. All progressive countries, however, are increasingly discarding this old and conservative concept. But it is rather strange to point out that a vast majority of the schools in our country are still clinging to it. As a consequence of it, the traditional philosophy of the curriculum is largely current and has not yet lost its hold on our teachers, administrators and supervisors.

In view of this it is not unusual to find that the syllabi for our schools are drawn up by departments of education and handed over to teachers ready-made. With a view to binding down the teachers still further, even text-books are prescribed. The poor teacher, therefore, has no opportunities to think out for himself and plan things in co-operation with the pupils. Over-emphasis on the three R's is generally visible and education has no relation whatsoever with life. It breaks up know-

ledge, which is indivisible, into subjects and thus distorts the vision of the child. In the words of Lall and Chowdhury, "It forgets the very elementary principle of education that the most fundamental basis of all true learning is the concrete experience of the child."

Besides the above shortcomings, the undue dominance of the examination system on the educative process has also, to a very large extent indeed, vitiated the entire atmosphere. The prevailing mode of examination system has, unfortunately, turned out not only to be an incubus but also the bane of the educational system, enemy of true education and begetter of rivalry and strife. W.H. Sharp, a former D.P.I. of Bombay Presidency, has depicted the stifling influence of examinations on Indian education in an interesting manner. He says¹ :—

"To every attempt to introduce greater flexibility into our education system the extraordinary fascination exercised by the Matriculation opposes a gigantic obstacle. It is hardly correct to say that the course of secondary education is determined by the department, or even by the university. It is determined very largely by the Matriculation examiners, whom the university sends up from time to time. If an examiner affects English Idioms, boys and girls all over the Presidency commit thousands of English Idioms to heart; if he affects obscure points of grammar, it is the same with rules of grammar; if he affects difficult examples in Algebra, all the candidates practise

1. Quoted from Percival Wren, *Indian School Organization*, Longmans, Green & Co. Ltd., Bombay, 1941, pp. xv, xvi.

algebraical tricks. Whenever you go into a school and ask why some foolish thing is being done the answer is the Matriculation."

Still another defect in the present state of affairs is the undue stress laid on English—a foreign language. This by itself has done incalculable harm to the cause of education in this country but coupled with the neglect of the mother-tongue it has been responsible for curbing the intelligence of our pupils and limiting their achievements. It has resulted in an undue emphasis on the ability to commit things to memory and vomit them in the examination without understanding them. The way in which this undue emphasis on a foreign language has resulted in a lowering of standards is both interesting and instructive. The 'babu' English is an example of it. The fact of the matter is that we could not master the English language because that was a foreign language and we did not acquire any high standard of proficiency in the mother-tongue because we never made a serious attempt in that direction. There have been instances where, in so far as schooling is concerned, children of nine, ten or eleven years of age have been made to spend four periods a week on the learning of the mother-tongue and fourteen periods and in some cases even sixteen periods a week on the learning of the foreign language—English. What an unnatural, anomalous and disgusting proportion !

These are the principal shortcomings of the curriculum as it exists in our country today. It is, therefore, imperative that these defects be removed if education is to improve. In this connection we have to draw the attention of the readers to the

vast treasures of knowledge which have been accumulating in the recent past about children and the way in which they learn. The numerous studies pertaining to the nature of children and the nature of learning have revolutionised our ideas about schooling, its techniques, its aims and its objectives. The old tradition by which children were expected to sit placidly on benches with folded hands and listen to the teacher, is crumbling and dying out. They are not to be regarded any more as empty receptacles to be filled with the educational *elixir* from without. The emphasis is fast shifting and the child is now regarded as a constantly growing and developing organism. The natural conclusion from this changed outlook is that the school should become a place where children live *as children* instead of being regarded as a special place where children are prepared or equipped for a stage of life which in some cases they may never live to see. The schools have no vested interests of their own—in the old days children existed for the schools but now the schools exist for children. An attempt is, therefore, made to see that life in the school and in the classroom is in keeping with the environment as it exists outside the school and the classroom. This end can be achieved only if the problems which the pupils face in these environments are real problems and the experiences which they acquire are purposeful, wholehearted and integrated. Arbitrary division of knowledge into subjects makes the pupil travel from one half-finished experience to another with little connection between the two. Hence, according to the changing views, this water-tight division of knowledge which is indivisible into subjects without any connection or relationship between them is not only

unnatural and undesirable but positively harmful.

Our views or convictions regarding the nature of learning have also undergone vast changes. Formerly the laws of Use and Disuse were emphasised and so learning was regarded as synonymous to the process of repetition and reproduction. But now we know that learning is essentially a need-centred process and a goal-seeking activity. It is a cyclic process which begins with the stimulation of a need in the learner and ends with its satisfaction. In the words of Professor H. R. Hamley, "It is a persistent and continuous process which takes many forms in response to many needs."

These important contributions in respect of the changed concept of learning and better understanding of children have gone a long way in changing rather revolutionising our concept of the curriculum. Instead of starting with the cultural heritage to be put across to children so as to be mastered by them or preparing them for a future life, we start with the children as we find them, discover their needs and try to meet them in the best possible manner. These needs are not mental or intellectual needs only but include physical, social and spiritual needs also. The physical needs mainly mean a mastery over the movements of the body machinery. This is essential if a child has to find his own way in this world. The social needs of children originate from their gregarious tendencies which are the very foundation of their social life and of their personal relationship with their fellow-beings. The physical and social needs do not exhaust the entire store of a

child's needs. He has a craving for a particular kind of inner satisfaction which leads to the creation of spiritual needs and they have also to be satisfied.

The above needs are personal to every child and their degree or intensity is also different in different cases and at different times. Moreover the learning capacity of each individual is also peculiar to himself and not uniform with others. It follows from these two principles that a curriculum intended to serve the needs of a community must be very elastic and flexible. It has to differ from locality to locality, from school to school, from teacher to teacher, and even from individual to individual. If it is rigid, mechanical or superimposed from above in the form of detailed outlines, it will meet with failure and defeat its own purpose. It has to be fluid so that changes and variations may be made in it keeping in view the needs of the individual and the requirements of the environment in which he is placed. As the accepted goals in such cases are exceedingly general, it is not only desirable but should also be possible to have only a general framework of learning leaving enough scope thereby for any changes or variations considered necessary to suit individual needs, requirements and circumstances.

Viewed thus the concept of the curriculum becomes very broad and fluid. Spontaneity becomes its watchword and any sort of predetermination, fixity or rigidity is disapproved, disliked and discarded. Besides, it emphasises 'attitudes' more than acquirement of knowledge or skill and even that in a spirit of freedom combined with a maximum of self-direction and self-determination.

It has been suggested above that the curriculum should be child-centred and that it must be based on the present needs, requirements and circumstances of the child. This is the first and most important principle of curriculum construction. But it is not enough by itself. The curriculum, in addition to being psychologised, has also to be socialised. This is so because in thinking and in planning for children we must keep two facts in mind. Of these two facts the first is that each child is an individual and must be treated as such. Secondly, he will always have to live with other individuals and, therefore, it is just desirable that as far as possible his needs and desires must harmonize with the needs and desires of those amongst whom he has to live.

The second fact stated above leads us to a very important principle—that the curriculum should be community-centred. It implies that all the activities which are taken up in a school should be relevant and significant to the social heritage of the child. This principle is as important as the first one because the child is an heir to the society in which he is born. As such he cannot be educated in a vacuum but has to be educated in and through the society in which he is born, the good of the society and the good of the individual being complementary and not contradictory. In other words a person's individuality has no meaning apart from society and likewise no society can exist without individuals who are its members.

It is, therefore, essential that our education must be organically related. In the words of the report of the Council for the Reform of the Curriculum, "The purpose of society

determines the purpose of the schools. The purpose of the schools decides the content of education. If society wants just technical efficiency, its educational provision will mainly provide technical schools; if it wants 'cannon fodder' its schools will become pre-military training establishments; if it wants divisions in society, it will provide a disintegrated educational system; if it wants unity, it will provide for common experience in pre-adult life; if it does not know what it wants, its educational system will reflect the social chaos. In every case, the curriculum is determined by the purpose of the society. To overlook these facts is to render any discussion on the problem quite useless."¹

The society, it should be remembered, does not remain static. It is dynamic and continuously changing. Growing up in the modern world is not so simple as it used to be in the past. Our personal needs are increasing, the structure and functions of the family are changing, there is a tendency to shift from the rural areas to the urban areas, social classes are more segregated from each other today than ever before, industrialisation is reducing us to the level of machines and our values in life are shifting. All these changes and many more similar ones have to be carefully considered and kept in view while developing a curriculum to meet the requirements of our schools

This can be accomplished by emphasising the experience curriculum and including in it the total learning activities

1. *The Content of Education*, The Interim Report of the Council for Curriculum Reform, University of London Press Ltd., London, 1948, p. 14.

that take place under the direction of a school. This broadening of the term is a natural sequel to the modern concepts in the realm of child growth and the psychology of learning. These branches of knowledge have given us three fundamental principles which we must keep in mind. They are first, that child growth is a total process rather than merely a mental process; secondly, that the whole school programme rather than just the class-room work and activities hold possibilities of growth; and thirdly, that people learn through participation rather than through passive assimilation of subject matter.

The two principles of curriculum designing, the psychologisation and the socialisation of the curriculum, have to be supplemented by another principle and that is the principle of integration. This is a very important principle and should not be ignored under any circumstances whatever. The word "Integration" as used here does not mean integration of subjects or integration of teachers' activities. It will be artificial integration. What we mean by it is the integration of the pupil's activities and the needs of the child as a child, on the one hand, with the needs of a particular twentieth century democracy, on the other. In other words it implies that the activities carried on in a school should not be treated in water-tight compartments but they should be so conducted as to lead the whole child to a functional unity with the environment. These activities, therefore, are not to be viewed as isolated units but are to be looked upon as parts of the human personality. In the absence of this wholesome

influence the whole programme is bound to become piecemeal and disjointed.

Integration, moreover, should have two dimensions. It should be both horizontal and vertical. Horizontal integration implies that the different needs of a child at a particular stage should be integrated. But this will not be enough. The real objectives of education at different stages have also to be integrated and so unified as to avoid any kind of anomaly or contradiction therein. This will be vertical integration.

This integration of experiences, it should be carefully borne in mind, is not to be the work of the teacher but that of the pupil himself. In other words it is to be done by each individual for himself and not by any other person. Unless it is done by oneself, it will not lead to the organisation of experiences into a functional unity which is so very essential for developing a proper approach to the persons and the problems one comes in contact with.

The principles stated above are very important and must be carefully borne in mind whenever drawing up a curriculum. Educationists in the past have suggested different types of curriculum ranging from the Subject Curriculum to the Experience Curriculum. If these two are placed at the two ends, a scale of various curriculum patterns can be drawn up in which the characteristics of those placed in the middle positions will have the features of the two types in different proportions. This scale or cutinuum could be represented as follows :—

Subject Curriculum.	Correlated Curriculum. Core Curriculum. Fused Curriculum.	Broad-field Curriculum. (i) Subject type. (ii) Experience type.	Unit of work Curriculum. Functions of Social life.	Experience Curriculum.
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It is not to be concluded from the above table that these types are mutually exclusive. The types placed in the three middle positions consist of various mixtures of the two sets of characteristics, those nearer the left end of the scale have more of the features of the subject curriculum while those nearer the right end of the scale have more of the features of the experience curriculum.

Hopkins has made an attempt to analyse the two extreme types of curriculum and bring out the salient points of difference between them. His characterisation of the types is indeed very useful and profitable. It is in fact a masterly analysis of the philosophies and therefore we take the liberty of reproducing it rather extensively. The differences as stated by him are as follows¹ :—

Characteristic differences in emphasis between the subject and experience curriculums :

Subject Curriculum

Experience Curriculum

1. Centred in subjects.

1. Centred in learners.

1. Hopkins, Thomas, *Interaction : The Democratic Process*, D. C. Heath and Company, Boston, 1941, p. 20.

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| 2. Emphasis upon teaching subject matter. | 2. Emphasis upon promoting the all-round growth of learners. |
| 3. Subject matter selected and organised before the teaching situation. | 3. Subject matter selected and organised co-operatively by all learners during the learning situation. |
| 4. Controlled by the teacher or some one representing authority external to the learning situation. | 4. Controlled and directed co-operatively by learners (pupils, teachers, parents, supervisors, principals and others) in the learning situation. |
| 5. Emphasis upon teaching facts, imparting information, acquiring knowledge for its own sake or for possible future use. | 5. Emphasis upon meanings which will function immediately in improving living. |
| 6. Emphasis upon teaching specific habits and skills as separate and isolated aspects of learning. | 6. Emphasis upon building habits and skills as integral parts of larger experience. |
| 7. Emphasis upon improving methods of teaching subject matter of specific subjects. | 7. Emphasis upon understanding and improving through use the process of learning. |

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| 8. Emphasis upon uniformity of exposures to learning situations and in so far as possible uniformity of learning results. | 8. Emphasis upon variability in exposures to learning situations and variability in the results expected and achieved. |
| 9. Education as conforming to the patterns set by the curriculum and its various associated instruments. | 9. Education as aiding each child to build a socially creative individuality. |
| 10. Education considered as schooling. | 10. Education considered as a continuous, intelligent process of growth. |

In the foregoing pages we have discussed the principles of curriculum construction and have compared the two philosophies—the traditional philosophy and the progressive philosophy. We have also brought out the main defects of the existing state of affairs in this respect. There is no denying the fact that the traditional curriculum has an irresistible hold on the minds of our teachers and educationists. It has been wielding its influence for generations together and consequently no radical change in its concept will be acceptable to the teachers *en masse*. To our mind it seems to be the primary reason why no initiative has at all come from teachers or administrators in the sphere of curriculum reform. As a class they have shown extreme apathy to this essential aspect of education.

We are also conscious of the fact that the progressive philosophy of curriculum construction requires teachers of

exceptional merit and of high calibre. This is so because it makes greater demands on their ingenuity and discrimination than the traditional philosophy of the curriculum does. Teachers who adopt the progressive philosophy have to be on the look out for constant modification of their techniques and attitudes. This adjustment is not an easy task but requires a high degree of intelligence, resourcefulness and clearheadedness.

Keeping these things in mind and learning by the American experience we feel that under the present circumstances a sudden and complete swing of the pendulum from the subject curriculum to the experience curriculum is neither desirable nor advisable. It is not desirable because of the remote chances of its implementation and it is not advisable because of the immense inertia that has to be overcome in this respect and the great hurdles which have to be crossed.

These considerations lead us to the framework which we propose for the curriculum of our schools in this country. We suggest an intermingling of the opposites and thus enable our readers to look at the problem from a higher perspective.

The first suggestion that we offer in this connection is that we must give up the practice of dividing curriculum into subjects. We know that this practice of fragmentation of knowledge has a very old tradition behind it and that it immensely facilitates the work on the part of the teachers. But we have to remember that tradition in itself is not enough to make a practice healthy and that easier procedures are not necessarily ideal procedures. The division of the curriculum

into subjects has unnecessarily walled off one experience from another and has led to the atomisation of knowledge. Moreover there is the inherent danger of the early specialisation and the consequent metamorphosis of education into sheer verbalism and mechanical memorisation.

With a view to remedying the defects inherent in the traditional division of the curriculum into subjects, different educationists have at different times put forward different suggestions. One of them came from Herbart, the famous German philosopher, and is popularly known as the correlation of studies. It is a method of unifying subject matter without bringing about any change in the prevailing practice of dividing knowledge into different subjects. Thus Herbart, without in any way changing the existing list of subjects, suggested that whenever there is an opportunity of co-relating one subject with another and bringing out the essential unity of knowledge the opportunity should invariably be availed of. For example, History can be co-related with Geography, Civics, Literature and Handwork, whereas Geography can be co-related with History, Science, Economics and Politics. Such examples could be multiplied but it should be remembered that this kind of relationship usually turns out to be casual, forced and far-fetched and emanates from the teacher rather than from the pupils. This device has been widely accepted but it should be borne in mind that it is only a device to unify subject matter and does not remove the defects inherent in the traditional division of the curriculum into subjects. It does not result in any reorganisation of the curriculum and there are two reasons why it has found special favour with teachers. First, the

subjects do not lose anything and secondly, it does not challenge the traditional practice.

Enthused with the philosophy of Herbart, Ziller suggested the concentration of studies. This plan or device suggests the making of a particular subject as the core or the centre of studies, the other subjects being studied in relation to it.

In the modern age this principle was enunciated independently by Mahatma Gandhi and is the very basis of the Basic Scheme which has been launched so vigorously and is being pushed forward so zealously by the different States in this country. An experiment on such an extensive scale has not been launched anywhere in the world so far and its results are awaited with great interest, avowed enthusiasm and keen expectancy. It may, however, be remarked in passing, without in any way damping the spirits of the enthusiasts of the Basic Scheme, that the principle of concentration of studies has not found favour to any appreciable degree with teachers, supervisors or administrators anywhere in the past.

Another device put forward by educationists with a view to relating subjects and breaking up the artificial and unnatural barriers between them is that of re-organising old subjects around new unifying centres. This is done by bringing together matter from different related subjects and re-grouping it under a new theme. For example, parts of subjects as History, Geography, Civics, Economics and Sociology may be and are being organised under a new theme—Social Studies. General Science and General Mathematics are other examples of fused studies. The fusion of subjects logically related to each other gives

greater unity to the curriculum and a curriculum so organised is known as a Broad-Field curriculum. The fields usually selected are Humanities, Social Sciences and Natural Sciences. But even this division into the broad fields does not solve our problem because these fields are not mutually exclusive as experience cannot be divided into water-tight compartments. Moreover, in actual practice, these broad fields have to be further subdivided by the teacher for proper, suitable and effective treatment.

Fusion, however, should not be confused with integration. The fundamental difference between these two terms is that the former is restricted to subject-matter whereas the latter pertains to one's experiences or personality. In other words the different subjects and their contents may be fused, but it will be the experiences of a person or the traits of his personality that can be integrated. In this way the process of fusion may be integrating for adults who are actually doing it, but it may not be so for the pupils who have to learn or acquire the fused knowledge.

The remedies suggested in the above paragraphs do not solve the problem. Instead of subjects, therefore, we suggest that we have activities and a school should be looked upon as a place where pupils busy themselves in activities and not in subjects. This will mean that the nouns of subjects will be converted into verbs of activities and it will, then, become possible for the teachers to carry them out in the spirit of play-way. The play-way should, in the words of Sir Percy Nunn, "lead continuously from the irresponsible frolic of childhood to

the disciplined labours of manhood." This change, moreover, will not only scrap the artificial barriers between subjects but also the inexpedient, undesirable and inadvisable subdivisions thereof. For instance, Mathematics is usually subdivided into Arithmetic, Algebra, Geometry, Mensuration, Book-keeping and Household Accounts. But in case of mathematical activities this fragmentation and atomisation will not only be inadmissible but impossible.

Secondly, we suggest that there should be some parts of the curriculum which are compulsory, called the core of the curriculum and some parts which are optionals, called the periphery. The core should comprise that part of the content, the irreducible minimum, which is regarded as necessary for every one to have so as to be able to live satisfactorily in a modern society. The periphery should comprise the rest and should permit of freedom of choice in accordance with one's interests.

This kind of framework does not belong to either of the extreme categories which have been discussed in the foregoing pages but is a compromise between them. It will not only assure the basic and the minimum essential but also permit of opportunities for experimentation and variation. Besides, it does not make any abrupt, revolutionary or precipitious change in the existing state of affairs but is conducive to the fundamental change in the attitude of teachers, pupils and administrators alike to the newer concept of curriculum construction. It should be remembered that in the initial stages the core will be emphasised but as the child progresses its importance

will decrease and the importance of the periphery will grow. In other words the curriculum will in the beginning be the same but at a later stage the students will be permitted to specialise in subjects of their choice and in accordance with their capabilities. This may come during the last two years of the secondary stage and not earlier.

The consideration of the curriculum in respects of core and periphery solves some problems which have been agitating the minds of educationists for long. Let us take an illustration. The question whether there should be a difference between the curriculums for rural and urban schools in this country has been argued at length. 82% of the people of the country live in villages and 70% of the people are agriculturists. There are naturally two schools of thought—one advocating the same curriculum, the other pleading for a different curriculum. The upholders of the former school base their argument on the psychological needs of the child which they stress are the same everywhere. The advocates of the latter view bring out the fact that education must conform to the local environment and this necessitates that objectives and consequently the curriculums of urban schools and rural schools should be different from each other.

The answer to this question, from our point of view, is both 'Yes' and 'No'. It is 'No' when we ask the question, "Should the core curriculum be different?" But it is "Yes" when we say, "Should the periphery be different?" What it implies is that the fundamentals should not differ and the details must not be similar, the intention being to increase the

vocational standards along with the educational standards. Similarly other questions as to the difference in the nature of curriculums for different sexes and so on present no difficulty.

Let us now examine the curriculum at the various school stages i.e. the primary stage and the junior and the senior secondary stages.

The primary stage is characterised with fulfilling the physical, mental, and social needs of children between the ages of 5 and 11 years. The main idea during this stage is to develop healthy attitudes and skills in the growing child. The activities at this stage should be divided into physical, linguistic, mathematical, scientific, and artistic groups. These groups will lead to a harmonious development of the child and a proper integration of his personality. Here the activities belong almost entirely to the core of curriculum and there is not much scope for choice because there is nothing which is more desirable for one child and less desirable for the other. Besides, all the work should be so intermingled with play that a child should not be conscious at all of pursuing academic study.

The junior secondary stage between the ages of 11 and 13 or preferably 14 is largely a continuation of the developmental work started at the primary stage. The field of work is widened and some more formal activities are steadily introduced but there is no attempt at specialisation of any sort. The widening of the linguistic group is especially important. At the primary stage this group comprised the mother tongue

only, the natural medium of self-expression of the child. But during this stage Hindi, the national language of the Republic of India, must be introduced in the wider interests of the country. Towards the latter part of this stage, English may also be introduced but it should not be made compulsory for everybody. Similarly the scope of other groups will also be extended and widened.

Specialisation should begin at the senior secondary stage i.e. at the age of 14 years. This should, however, take place according to the needs of the community and the aptitudes of the pupils. We have not made much progress in the aptitude-testing so far in this country and an enormous amount of research is needed in this direction to make our findings valid, reliable and foolproof so that they could be relied upon and useful conclusions drawn from them.

In regard to the senior secondary stage we have to draw the attention of the readers to another point. At present we have a uniform system of secondary education and that has only one bias, the academic bias. This single-track system entirely ignores the interests, aptitudes and tastes of pupils and drives them on the same road, in the same direction and at the same speed. This lock-step arrangement has done incalculable harm to the cause of education in general and to the interests of pupils in particular. Those who do not have academic interests are dubbed as unresponsive, unintelligent, and below the level. As their abilities are never discovered, they can never have that satisfaction which comes from self-expression and leads to the integration of personality.

It is, therefore, imperative that we should give up the single-track system of education. This will enable us to cater to the aptitudes and the interests of other children also. Three kinds of abilities are recognised—Academic, Technical, and General. Courses must, therefore, be provided for all of them.

In applying the above suggestion in practice there is an important point which should never be lost sight of. These courses should not be very narrow but they should be broad-based. The aim of the technical course, for example, should not be the production of technicians. The advocates of specialisation should remember that a technician is first a human being and a technician later. The division of the curriculum into the core and the periphery will go a long way in enabling us to appreciate the difference between the two points of view enunciated above. The core curriculum will serve the needs of the individual as a human being and the periphery will provide the rest. This end will be achieved because every pupil, even in this tri-furcation, would pursue some activities which would be common to all the groups. This core will include linguistic activities, scientific activities and social studies and it will be in addition to the studies which the individual will pursue in keeping with his professional aims, interests and capabilities. Only in this way will it be possible for us to make the best use of a pupil's talents and avoid waste of educational effort and stagnation of human enterprise and endeavour.

The Secondary Education Commission (1953) has

considered this problem and recommended seven groups of study at the high school and the higher secondary stage. They are as follows :—

- A. (i) Mother-tongue or Regional language or a composite course of the mother-tongue and a classical language.
- (ii) One other language to be chosen from among the following :—
 - (a) Hindi (for those whose mother-tongue is not Hindi).
 - (b) Elementary English (for those who have not studied it in the middle stage).
 - (c) Advanced English (for those who had studied English in the earlier stage).
 - (d) A Modern Indian Language (other than Hindi).
 - (e) A Modern Foreign Language (other than English).
 - (f) A Classical Language.
- B. (i) Social Studies—General course (for the first two years only).
- (ii) General Science including Mathematics -- general course (for the first two years only).
- C. One Craft to be chosen from the following list (which may be added to according to local needs) :
 - (a) Spinning and Weaving.
 - (b) Wood-Work.
 - (c) Metal-Work.
 - (d) Gardening.
 - (e) Tailoring.

- (f) Typography.
- (g) Workshop Practice.
- (h) Sewing, Needle-work and Embroidery.
- (i) Modelling.

D. Three subjects from one of the following groups :—

Group 1. (Humanities).

- (a) A classical language or a third language from A (ii) not already taken.
- (b) History.
- (c) Geography.
- (d) Elements of Economics and Civics.
- (e) Elements of Psychology and Logic.
- (f) Mathematics.
- (g) Music.
- (h) Domestic Science.

Group 2. (Sciences).

- (a) Physics.
- (b) Chemistry.
- (c) Biology.
- (d) Geography.
- (e) Mathematics.
- (f) Elements of Physiology and Hygiene (not to be taken with Biology).

Group 3. (Technical).

- (a) Applied Mathematics and Geometrical Drawing.
- (b) Applied Science.
- (c) Elements of Mechanical Engineering.
- (d) Elements of Electrical Engineering.

Group 4. (Commercial).

- (a) Commercial Practice.
- (b) Book-keeping.
- (c) Commercial Geography or Elements of Economics and Civics.
- (d) Short-hand and Typewriting.

Group 5. (Agriculture).

- (a) General Agriculture.
- (b) Animal Husbandry.
- (c) Horticulture and Gardening.
- (d) Agricultural Chemistry and Botany.

Group 6. (Fine Arts).

- (a) History of Arts.
- (b) Drawing and Designing.
- (c) Painting.
- (d) Modelling.
- (e) Music.
- (f) Dancing.

Group 7. (Home Science).

- (a) Home Economics.
- (b) Nutrition and Cookery.
- (c) Mothercraft and Child Care.
- (d) Household Management and Home Nursing

Besides the above a student may take, at his option, *one* additional subject from any of the above groups irrespective of whether or not he has chosen his other options from that particular group.¹

1. *Report of the Secondary Education Commission* Government of India, Ministry of Education, 1953, pp. 86-88.

The scheme of studies suggested by the Secondary Education Commission is indeed a great improvement over the existing state of affairs. It has many advantages in it—the most important of which is the fact that it provides opportunities for meeting the special abilities and aptitudes of the pupils. Besides, the grouping of subjects offers them a well thought-out programme of studies, compact and integrated.

There are, however, two points to which we would like to draw the attention of our readers. First, a pupil can pass the High School and the Higher Secondary Examinations without taking up Hindi, the national language of India. We feel that in the interest of the national unity of our country it is absolutely essential that greater and still greater importance should be given to this language than ever in the past. This end can be achieved only by making it a compulsory subject of study and examination. Some people might object to this suggestion because of the fear that it might lead to an overemphasis on the study of languages. But in view of wider interests it seems necessary that it should be made a compulsory part of the secondary school curriculum.

Secondly, we visualise a practical difficulty in the implementation of the scheme. No school, unless it is sufficiently big, would be able to provide for all the groups. And if a school provides for only one group, the very purpose of the scheme would be defeated. Leaving out extreme cases we can safely take it that an average school will provide for three groups. Provision of even three groups, we can safely

affirm, is bound to increase the cost of education and the increase will not be insignificant. In view of this we are doubtful if a country like India will be able to meet the financial implications of the scheme and afford the enhanced expenditure. It is, however, a matter of genuine gratification to learn that the Government of India are giving liberal grants to the States for the purposes of implementing this scheme. During the First Five Year Plan, 650 courses have been allotted to selected schools in the country and a major share of the initial expenditure has been borne by the Central Government. If this continues the scheme bids fair to be a great improvement over the previous schemes. But if the Central Government tightens its purse strings the scheme, we are afraid, might be shattered on the hard rock of finance.

After having suggested the courses of study at different stages, there is another problem to be faced. There are, at present, a large number of activities which are termed as "extra-curricular" activities. They include games, assemblies, hobbies, debates, study circles and such other activities as lead towards a realisation of the civic-social-moral aim broadly conceived. They are of immense help in rounding off the many-sided development of children by offering them such educative experiences as it is difficult to provide through the subjects ordinarily taught in the class-room. It is, therefore, necessary that they be recognised as specifically "curricular" in character and the absolutely unnecessary, unwarranted, undesirable, and inadvisable tag "extra" attached to them should be dropped. They should be planned as a regular part

of the work and not treated as activities for the purposes of merely showing-off or impressing the visitors or supervisors. It is because of this aspect of their importance that the modern trend amongst educationists is to regard them as co-curricular and not as extra-curricular.

Two questions now arise prominently in connection with curriculum construction. The first is, "When should curriculum revision take place?" and secondly, "who should carry out this curriculum revision?"

The philosophy behind these two questions is that there must be some academic justification for revising the curriculum, and that only specialised persons having the correct background and experience can gainfully and profitably carry out the revision. As stated elsewhere, the practice in our country in this respect is to appoint a committee consisting mostly of officials of the education departments with some non-officials to examine the curriculum and suggest changes. This revision virtually boils down to a re-arrangement of items, additions to the existing list of items and omissions therefrom. As a rule, this board or committee is a kind of high power committee and teachers are seldom associated with it.

Such a practice is open to serious criticism. It is now recognised by all educational thinkers that unless the teachers have had a hand and a good hand in the preparation and finalisation of a curriculum they can neither understand its implications, nor can they carry it out effectively. Moreover,

curriculum revision invariably implies changes in the class-room practices and techniques and only a fool will suppose that a change in the class-room procedures will automatically follow a re-arrangement or a re-adjustment of the items in it. Leadership in curriculum development must pass from subject specialists and administrators to the workers in the field and armchair methods must yield place to the developmental and experimental methods.

We, therefore, suggest that curriculum revision should be a continuous process. It should be an informal affair carried on regularly under the creative leadership of the educational supervisors and administrators. They should develop the capacities of teachers and enable them to evaluate the curriculum constantly and modify it accordingly. A teacher, moreover, should not make it a closed purview of himself but it should develop with the close co-operation of pupils and others. This end can be achieved through committees, meetings, study groups, parent-teacher-meetings, workshops, and experimental findings and investigations. All efforts in this connection should be carefully co-ordinated with a view to achieving the important tasks which have been assigned to education. In this way curriculum construction and curriculum revision should be considered not only as specialised agencies but also as co-operative responsibilities.

Chapter VI

Methods

MUCH good in education depends on how the teacher does his work, what methods of explanation or elucidation he uses and how he organises his teaching that it results in creating a healthy, wholesome and useful learning atmosphere. The curriculum may be excellent, the philosophy may be superb, the administration may be ideal and the organisation may be perfect but it will all be ineffective, unserviceable and out-of-gear unless the methods employed are such as will produce effective results and lead to active, successful and integrated learning.

This indeed is the ultimate criterion and the real touch-stone of a teacher's worth. We are, however, constrained to point out that this vital and valuable principle of teaching has not received the consideration that it so richly deserves. There was a time in the history of education when teaching meant telling, and learning implied memorising. In those days the teacher did practically all the talking while the people just listened to him and sat as motionless as possible. This was invariably followed by asking the pupils in turn to "back the book", that is he had to turn his back on the book and recite the lesson from memory. Discipline in those days meant keeping quiet in the class for fear of punishment. Movement was prohibited as far as possible and sitting still was the ideal to be achieved. There was no contact between the teacher and the taught. Education was reduced to a dull, mechanical process. There was no human touch, no freshness

of approach and no regard for the personality of the child. The entire emphasis was on knowledge—inert and passive as a rule. Knowledge and wisdom were regarded as synonyms and the essential distinction between them which has been so ably brought out by William Cowper in the following lines was neither understood nor appreciated :—

*“Knowledge and wisdom, far from being one,
Have oft times no connection. Knowledge dwells
In heads replete with thoughts of other men ;
Wisdom in minds attentive to their own.
Knowledge, a rude unprofitable mass,
The mere materials with which wisdom builds,
Till smoothed and squared and fitted to its place,
Does not encumber whom it seems to enrich.
Knowledge is proud that has learned so much,
Wisdom is humble that he knows not more.”*

The old methods and procedures have, however, undergone a change during the last hundred years or so. Psychology has made rapid progress and teaching has been given the status not only of an art but of a science as well. As a consequence of this, a radical change is discernible in the methods to be adopted and the techniques to be used. It has, therefore, become imperative for a prospective teacher to be “educated” for the job. Knowledge is essential for a teacher but it is strongly realised that it is not the whole story. It has to be supplemented by learning how to teach and this, in its own turn, is not a closed study with a set pattern or a fixed, rigid routine. It has to take into consideration a

number of variables which have to be blended together in different proportions in different cases and in different places and the final outcome of all these is a unique, novel, inimitable product which bears the stamp of the person and is a result of his own genius and individuality and can be expressed only in terms of his qualities and characteristics.

The greatest factor that has brought a revolution in the educative process is the revelation that every child has his own personality and that it is quite different from those of the rest. This variation between individuals is not a new discovery. It is as old as human race and is universal and ineradicable. Plato stated this fact, Quintilian stressed it, Locke reiterated it with all the force at his command, and Rousseau hurled it back at us to make what use we will of it. Not only these thoughtful persons but quite a host of others saw among the people persons ranging all the way from stupidity to cleverness, from imbecility to genius, from meanness to generosity, from utter selfishness to complete self-denial and from emotional balance to psychotic disintegration. But inspite of this realisation we have been guilty of adopting group methods and providing the same fare to everybody without exception. Our methods, in the past, have failed to temper the wind to the shorn lamb. They have missed the fundamental point in the old adage—one man's meat is another man's poison. We have, therefore, to bear in mind the most important and consequential fact that wholesale and similar methods have very limited use. In other words, because the amount of 'g', 's' and 'w' in every child varies, therefore,

in order to get best results, education must adjust itself to the abilities and aptitudes of every pupil. Professor Moore in his book, 'What is Education ?' declares that "the teaching yoke must be fitted to the size of the individual mental shoulders, for which the teacher must have that personal first-hand contact with pupils." Uniformity in education, he stresses, "must go the way of outworn shibboleths." As things are education fails to become an individual affair between the teacher and the taught.

This is why we can quote innumerable examples of "dunces at school" who achieved phenomenal success after leaving school. Darwin, Herbert Spencer, Newton, Tagore and Winston Churchill are some names amongst many who never distinguished themselves in school life but attained outstanding fame afterwards. The reason for this is not far to seek. Theirs were the cases where the type of education given was not in accord with their abilities and aptitudes. It, therefore, failed to provide them opportunities of being at their best in the alien environments and when the proper opportunities were offered they shone brilliantly on the firmament.

It is, therefore, imperative for the teacher to recognise the personality of the child, accept it and work with the grain and not against it. The greatest secret of success in teaching, according to Emerson, lies in "respecting the child". This will create in him a healthy sense of self-respect, the greatest quality in an individual. Self-respect will breed self-reliance and both of these will, in turn, lead to the

development of a well-balanced and well-integrated personality. It should, however, be clearly borne in mind that too much governing, on the one hand, and too much of pampering, on the other, are both bound to kill his individuality. A child, it cannot be denied, will do only those things well which he wants to do himself and not those that others want him to do, follow or pursue.

Consequently, "Freedom" is another essential requisite of good, healthy and wholesome education—freedom to learn! Freedom not only encourages but is the very *sine qua non* of growth. The man who lives an "echo life" in a state of "passive docility" and "readymade existence" lives anything but his own life. He develops a personality which is not his own and this is bound to bring about frustration which may in its turn develop into a perpetual feeling of inferiority. If this happens we are not educating people for "success" but we are in fact educating them for "failure". The teacher-made laws must, therefore, be reduced to the very minimum and the scope of options for the pupils should be increased enormously. Exploration and experimentation should, therefore, become the very essence of new methodology.

A child by his very nature is active. He loves activity and it is through this that he realises his own nature and develops his own individuality. Unfortunately this aspect of his make-up was ignored in the past and consequently education became inert, passive and wooden. But it has to be clearly borne in mind that inert or passive education holds no joy for him. It bores him and he looks upon it as a sort of

imprisonment. The present technique is to relate "learning" with "living" and with "doing" instead of restricting it to mere "listening". This creates joy in his mind for learning and he gladly comes to school to learn. He is interested in the school and in the work carried on there as it is meaningful to him. He pursues it with a zest and does not get tired of it. Our methods must, therefore, emphasise activity—activity which is both meaningful and purposeful to the child.

Every child is also by nature an investigator. He accepts a thing more readily if it is the result of his own efforts instead of accepting equally readily another thing which is done by somebody else or is told him by an alien authority. Modern education leaves him free to take the initiative. The teacher takes the role of a "guide", "watcher" or "helper". The child becomes an "experimenter" and "explorer". What he learns thus he learns never to forget.

These are some of the tendencies which are current in modern methods. The essence of all these is "individual approach". It has not to be considered synonymous with individual instruction as there are certain studies where the child learns better in a group than by himself. It makes the child all important and regards him as the measure of all things. The aim is to bring out the best in the child and man and as such the entire responsibility to learn rests with the learners. The business of the teacher is simply to so adjust the materials and the forces as to become most suitable to the capacities of individual children. He is there as an organiser of a pattern of varied activities so that they will be

most effective and fruitful to bring about the desired learning. The stress is on "attitudes" rather than on "accomplishments" or on "examination results". Schools and teachers, therefore, only strive to provide a "learning atmosphere".

During the past two hundred years or so, a number of teaching methods incorporating some important points raised above have been evolved. The Object Lesson, Concentration of Studies and Kindergarten Method were the first to be thought out and put forth as improvements on the then existing methods. Since the turn of the century, however, the number of such suggestive techniques and plans has multiplied manifold. The Heuristic Method, the Montessori Method, the Project Method, the Dalton Plan, the Winnetka Technique, the Decroly Plan, and Platoon idea are some of these "fads"; and to quote from nearer home the Basic Scheme is another new device to improve education and revolutionise its methods.

The advocates of some of these new techniques have even suggested that theirs is the last word on education and that it places the magic wand in the hands of the teachers. We do not accept any such views and we cannot help remarking, with all the force at our command, that the last word on teaching methods has not been said and can never be said. This is primarily so because education is dynamic and not static. In the words of Sir Percy Nunn, education is "a practical philosophy and as such it "necessarily touches life at every point. As life's ideals are eternally at variance, their conflict will be reflected in educational theories" and

consequently in methods of education. These techniques, however, are certainly a great improvement over the "learning by listening" or the "assign-study-remember" techniques. The success or the failure of these, however, depends on the enthusiasm and resourcefulness of the teacher. One method may succeed with one teacher but may be an utter failure in the hands of another. This is so because teachers have their own differences and variations, beliefs and ideals.

At this stage, however, it will be useful and worthwhile to discuss the new methods in a very brief outline and bring out their salient features. It will be futile to discuss every method here because that would make our discussion unduly lengthy and consequently irksome. We, therefore, propose to discuss some of the outstanding contributions in this field.

Among the many suggestions that have been offered in this connection, one of the first came from the German philosopher-cum educationist, Friedrich Froebel. He suggested a new scheme for the education of young children and called it "Kindergarten"—the children's garden. This system, in the words of the originator himself, is meant to give children "employment in agreement with their whole nature, to strengthen their bodies, to exercise their senses, to engage their awakening mind and through their senses make them acquainted with nature and creatures."

The Kindergarten, therefore, seeks to cater to the needs and requirements of the child himself. Its main characteristics are self-activity, play and unity in instruction. Self-activity helps the child to realise his own nature, its watchword

being freedom. In order to achieve its purpose, self-activity must be self-produced, self-maintained and self-directed. Play is nature's mode of education and is the most effective method of learning. In this system, therefore, many play activities have been designed to guide and develop the whole nature of the child. Unity in instruction represents the central theme of Froebel's philosophy. There is unity in life and likewise there must be unity in all the aspects of education.

In its practical aspect the Kindergarten lays great emphasis on handwork, sense training, social unity, gifts and occupations, songs and other associated activities. Nature Study and Gardening are to be the very core of all studies and there are songs for all sorts of activities. The gifts represent special material designed by Froebel for the sole purpose of educating children and a number of activities can be carried on with their help. There are 26 such gifts and the different ways in which they can be used are laid down in great detail indeed.

This system of imparting education to children is indeed a great improvement on the old methods and this is why it has its followers and adherents in all parts of the world. But it cannot be denied that there is a good deal of formalism in this system, besides there being undue insistence on the order to be preserved and the rigour of practice and external control to be adhered to. This consequently denies the teacher, who is wedded to this system, the proper measure of freedom which is so essential for success and achievement. Besides this, Froebel expressed his ideas in mystic phraseology and he perceived strange symbolic significance in human actions and

visible things so much so that he called the gifts which he had himself devised as god's gifts. These are certainly some of the drawbacks of the Kindergarten system and its wholesale adoption, therefore, will not prove very satisfactory.

Another method which is so well-known in this country is the Montessori method. It was originally propounded by Dr. Maria Montessori for imparting education to mentally defective children and laid emphasis on their senses. Having achieved a great measure of success in this experiment, she extended its scope so as to include normal children in its purview.

Dr. Montessori believed education to be the "unfolding of the latent powers of the child." To achieve this end she stressed individual attention, free discipline and training of the senses. All this leads to "auto-education" for which the author of the system devised a set of apparatus called the developmental material and also set out a few exercises which enable the child to become independent of the older folks in practical life. This apparatus is the most important feature of the method. Through this apparatus the tactile, the stereognostic and the thermal senses are trained besides the common senses of touch, taste, smell, hearing and sight. The scope of the apparatus designed by Dr. Montessori is very wide indeed and covers all basic subjects. In Arithmetic, for example, it extends from simple numeration and notation to the extraction of cube root.

Dr. Montessori believed in individual instruction. She maintained that the child should be the unit of instruction. She

does not abolish the class completely but maintains it as a unit of organisation only. There is, therefore, no collective teaching in this method. The furniture and equipment are designed especially for children and the cupboards are so low that the children can take things away and put them back on their own.

In spite of there being so many good points in it, Montessori Method is not the ideal method from every point of view. It has its own limitations. The chief objection levied against it is that it puts too much emphasis on specially designed apparatus and the entire activity of the children is generally reduced to a mechanical manipulation of the same. It, moreover, ignores play activities of children and gives very little scope for self-expression. Dr. Montessori has also made the method rigid by denying the teachers the privilege of designing new apparatus on their own and using it in their classes.

Still another method which regards teaching from the child's point of view is the Project Method. It is a result of John Dewey's philosophy of education and is a natural extension of the Problem Method. But the credit for initiating it goes to Professor William Heard Kilpatrick. This method lays great stress on taking the pupils into confidence and impressing upon them the why of doing things in the school. Work, in this method, is to be carried on in the form of projects and nothing whatever is to be imposed on them from without—not even from the teacher who takes upon himself

the duties of an adviser only and comes in handy for guidance and suggestions.

A project in the words of Dr. Kilpatrick, is a "whole-hearted purposeful activity proceeding in a social environment." The main features of the method, therefore, are purpose, activity, natural setting and social environment. The purpose must be of the children themselves, the method employed for the achievement of the purpose must be based on activity and it must be achieved in a social environment in as natural a setting as possible.

The practical working of the method consists in selecting a problem and then making an about effort to solve it. In this way a good deal of learning will take place and the solution of the problem will lead to the discovery of some principles. The knowledge thus acquired and the principles thus learnt will not be in the usual form divorced from life and relevant to particular subjects only. There will be no barriers between subjects and no set limits as regards the standards to be achieved in different branches of knowledge. Only that knowledge will come in which is relevant and related to the project in hand and the purpose of acquiring it will be evident to the participants.

This method has many advantages. It concentrates on active matters and also scrapes the water-tight compartments in which knowledge is usually divided. It, moreover, gives reality to the work of the child and automatically leads to the proper type of motivation. It also develops right social habits and the participation with to live in a democratic society.

Finally, the participants become self-reliant and resourceful by experimenting how to share responsibility with others.

This is, however, one side of the picture. Proper development of different kinds of knowledge does not take place in this method and what is required by some is independent and unproductive. Those ends in knowledge are bound to be left here and there if work is done according to this plan. This is not all. The system, if it is properly understood, can and can be frustrated easily by following this method. There are, however, some consequences for the student to the advantage of the subject and which we keep them close in the hands of the teacher. Because of these advantages, this method has an unusual appeal.

Another plan that has come to us from the States is the Boston Plan. This plan which is now known as the Laboratory plan, emphasizes the use of resources and was first tried out at Emerson's Mass. High School in 1909. According to the philosophy of this plan, the teachers in subject rooms are not teachers of the subject, but of their subject teachers. The year work is divided into monthly assignments and students to finish them at their own convenience. They are free to work on these assignments whenever they like and if they do not like to work they can safely postpone them. The progress of an individual, however, depends on his finishing the assignments in time for a particular statement to the satisfaction of the different teachers. The assignments are not given away all at one time, but only one assignment is given in each subject in the beginning and the next assignment will be

given to the child only on the successful completion of the previous one. Every laboratory contains books and other material relating to that subject and students need not have any text-books of their own. The progress charts of different pupils are kept in graphs and they show the standard of pupils' attainments in a particular subject just at a glance. They also show the relative progress of the pupil in comparison to the other pupils of the same standard,

The duties of a teacher under this system are largely to prepare assignments, give them to the pupils, help them individually in doing their work, check their work, watch progress, keep records, issue books, receive them back and also keep the laboratory up-to-date.

This plan provides an excellent technique of individualising instruction and thus it enables the pupil to proceed at his own pace. There is absolutely no sense of hurrying along or holding back because of others. The responsibility for the assignments, moreover, is thrown on the shoulders of the pupil and so he is trained for the acceptance and discharge of responsibilities assigned to him. The pupil learns to consult many books instead of depending on the text-book only. And finally, some important problems which arise in other schools and cause a lot of trouble e. g. compulsory home-work, annual promotions and lack of personal knowledge of pupils and their progress just vanish into thin air.

It must, however, be remembered that the Dalton Plan ignores oral work and is suitable for fairly grown up children only. It also ignores the qualitative differences between

pupils and is not suitable for the teaching of inspirational subjects. In addition to these shortcomings, the Plan cannot be adopted in the existing schools without radical changes and alterations. Amongst other things it requires buildings which have to be specially designed for the purpose. The class-rooms must be much bigger and library facilities must be available in every room. Even books have to be re-written if the Plan is to succeed

Another technique worth careful consideration and thoughtful reflection is the Winnetka Plan. This plan is the innovation of Dr. Carleton Washburne and his colleagues and has been tried very successfully in the schools of Winnetka. It is another device for the individualisation of instruction and aims at the adaptation of the schools to individual children instead of making it incumbent upon the pupils to adjust themselves to the dictates and requirements of the school. It prefers piece-work to team-work and emphasises learning as compared to teaching.

The curriculum, according to this plan, is divided into two parts. Under the first part come the "common essentials"—the 3 R's and other similar things. This part consists of such knowledge and skills which make children like-minded. The second part consists of opportunities for creative work under social conditions and provides the pupils with opportunities for self-expression. In this way each pupil has to contribute to the group something of his own special interests and abilities. To achieve this end half the time of the school is spent in individual work in the common essentials, while the other half is devoted to group and creative activities.

The real essence of the Winnetka Plan, as stated above, consists in the individualisation of instructional material. This material is prepared in such a manner that it is not only self-instructive but self-corrective also. The child teaches himself new things and practises each step till he reaches the requisite standard of mastery in it. As soon as he has done it, he passes on to the next step or lesson without waiting for any hint from the teacher or marking time for the progress of his class-mates. Each lesson has some exercises appended to it and they are so devised as to meet the varying needs of pupils of different abilities. The teacher does not give any lessons or teaches the class as a whole. He goes about the class in a most informal manner and gives help and discusses things either individually or in small groups. Many equivalent forms of diagnostic tests are given in the pupils' books so as to enable them to do those tests and discover their own gaps of knowledge or shortcomings in comprehension. These tests have been provided not for the purpose of examining children in the usual sense and assessing their ability but their purpose is to discover the place or places where a child's weakness lies and where he needs help. Ample material is provided in each book for filling up the deficiency in knowledge and comprehension of pupils.

The pupils are, however, not left entirely to themselves. They are divided into two groups—the self-reliant group and the supervised group. Those who belong to the first group, budget their own time and work according to their own inclinations. The supervised group, on the other hand, has to work accord-

ing to a set programme and follow a fixed routine. Any member of this group, however, can be rated as self-reliant and transferred to the other provided he fulfils certain conditions and comes up to the requisite standard. The decision, it must be remembered, is not arbitrary—it is discussed with the individual child in each case by the head of the Institution.

The assembly is another indispensable part of the working of this plan and it is entirely a student-managed-affair. This body is competent to make laws for the school population and see to their observance. Every pupil, moreover, has to do some responsible job like serving on a committee, taking care of some assignment or looking after the furniture or the premises. Field-work, trips, school newspapers and other activities of the type are some of the chief characteristics of the plan.

From what has been said above, it should not be concluded that the Winnetka Plan is a finished and finalised product. In the words of Dr. Washburne, "it is an educational laboratory in which new methods of education are being tried out and the results carefully measured." There can, therefore, be no set or fixed procedure—it has to keep on varying from time to time and from class to class. As new facts come to light, the practices are modified or altered. Variation, therefore, is the rule in Winnetka Plan and not an exception. This plan, however, has not yet caught the enthusiasm of the teachers in any large measure. One of the reasons for this is that it has some of the defects of the Dalton Plan inherent in it and hence its misfortune. Moreover, it demands a very

elaborate preparation on the part of the teachers in the form of text-books, tests and so on and as a result of it teachers in general all over the world have not taken to it kindly.

Still another device that comes from the States is the "Platoon Plan" or the "Platoon School". To a cursory observer it may seem to be more a plan of organisation than a plan of teaching methods but the idea it embodies is so useful that a brief reference to it here would not be out of place

The first school on the Platoon Plan lines was organised in 1900 in Bluffton, Indiana, by William Wirt, Superintendent of Schools. Later on Mr. Wirt became Superintendent of Schools in Gary and there again he introduced the same idea. This plan, therefore, is known as the Gary Plan also. Besides, there are some other names for this plan. They are the Work-Study-Play School, Duplicate School, Companion Class School, Alternating Plan School and Recitation-Study-Play School.

According to this plan the school is divided into two groups—one group pursues activities of the usual type in the class-rooms whereas the other group occupies itself with activities either in special rooms or in play-grounds. This goes on for half the day and then the activities are alternated and the two groups exchange places—those who were working in the class-rooms change over to activities in the specially-equipped rooms or play-ground and vice-versa. This results in a good deal of economy in the form of buildings, furniture, equipment and the like and also makes it possible for the

school plant to be utilised continuously and more effectively throughout the day. The initial saving that is effected in respect of the school plant is utilised to provide special facilities in the school for pupils in the form of gymnasia, swimming pools, libraries and other conveniences of the same type. In this way by sharing the equipment, space and material and utilising the school plant facilities to the maximum, it becomes possible to "duplicate" the school and provide accommodation for almost double the numbers.

It would be wrong to conclude from this that the Platoon Plan is only a plan of organisation in the form of achieving economy in the school plant. Those who think like this are working under a great misapprehension. The plan is in fact an important contribution to the methodology of education and is a means to the end of achieving an all-round development of individuals and creating many-sided interests in them. If properly utilised the varied activities will lead to the development of well-balanced personalities instead of merely developing the intellect at the cost of social, aesthetic and physical aspects of personality.

The Platoon Plan is a unique plan for the utilization of the entire school plant to its maximum capacity. It reduces the undue importance attached to bookishness and intellectual studies in schools and gives athletics, music, art and other such activities the place which they so richly deserve in any scheme of studies worth the name. In such cases pupils learn not through passive assimilation of subject matter but through active participation in the various activities. This

plan, moreover, should be welcome in our country at the present moment where overcrowding is a rule and not an exception.

Another plan related in some ways to the foregoing techniques is the Decroly Plan. It is an important means of increasing pupil-participation in class-work and enables the children to share their ideas, impressions and experiences with others. This is to be done not in the sphere of recreation only but is employed for more serious purposes including academic work.

The originator of the plan, Dr. Olivind Decroly, was a biologist. The plan, therefore, depicts the biologist's point of view and makes the primary human needs i. e. food, clothing, protection, livelihood etc as the very basis of education. These needs are called as "centres of interest" and Dr. Decroly feels that "centres of interest" should not only guide but also control the content as well as the method of education. In order to achieve this end the educational programme devised for the child is divided into two categories : (a) knowledge of himself, his needs, his aims, and (b) knowledge of natural and human factors in his environment on which he largely depends and which he largely manipulates.

Under such a system all education is given in a simple and vital environment close to nature. Every child must know his environment and be useful to the community. The curriculum, therefore, has a biosocial bias. Physical development is greatly stressed and put before everything else—even the 3 R's. Teaching of Science also plays an important role

and all learning is to be effected through observation, discussion and impact of mind upon mind. Text-books are avoided as far as possible and emphasis is laid on living, thinking and learning.

In actual practice the class is divided into small groups of fifteen pupils and each group selects a "centre of interest" for investigation and study. The "centre of interest" is then further divided into different aspects and each pupil selects one of these aspects in keeping with his own interest, ability and aptitude. He studies this problem in great detail and writes out a full report which is then presented to the other members of the class in the form of a lecture. Other members of the class ask him questions, the aim of the questions is not only to get their own doubts resolved but also to discover the depth of the particular pupil's understanding and mastery of the subject. If he is found deficient, he is required either to look up the information which he lacks or to do the whole report all over again. The work of the other pupils does not end with eliciting information, offering criticism or besieging him with questions only. They have to prepare their own reports on that subject and this necessarily occupies a greater part of their school day.

This method embraces some important characteristics of progressive trends. It creates learning situations and thus makes education purposeful. Besides, it takes into consideration the needs of the individual as well as those of the society. But it should not be forgotten that it also suffers from some

inherent weaknesses, the most prominent of which is the unsatisfactory mastery of fundamental facts and skills.

In evolving new methods India has not lagged behind either. In the present century her saint-politician Mahatma Gandhi spotted the weaknesses of the prevailing system of education and with a view to removing the defects and reforming the system he wrote extensively on education. His educational ideas are not expressed systematically in any book or speech but are scattered all through his writings and speeches.

With the insight of a philosopher, Mahatma Gandhi diagnosed the fundamental defects in the system of education introduced in this country by the British rulers in the 19th century. In the first place it was one-sided because it emphasised the culture of the head and ignored completely the twin cultures of hand and heart. It imparted instruction in the fundamental skills of Reading, Writing and arithmetic, no doubt, but left out moral, physical and emotional natures altogether.

Secondly, it ignored the life as it was lived in the community. In a country which was largely agricultural the emphasis was laid only on literary education and boys and girls were made unfit for manual life and manual work. Labour was despised and the dignity that goes with it was unknown.

Thirdly, it was based on a foreign culture which was completely alien to the immediate surroundings. In the words of Mahatma Gandhi, the Indian child "is never taught to have any pride in surroundings. The higher he goes, the farther

he is removed from his home so that at the end of his education he becomes estranged from his surroundings. He feels no poetry about the home-life. The village scenes are all a sealed book to him. His own civilisation is presented to him as imbecile, barbarous, superstitious and useless for all practical purposes. His education is calculated to wean him from his traditional culture."

Lastly, he advocated that real and effective education could never be imparted through the medium of a foreign language. He pointed out that "The foreign medium has caused brain-fag, put an undue strain upon the nerves of our children, made them crammers and imitators, unfitted them for original work and thought and disabled them for filtrating their learning to the family or the masses."

In order to remove these defects and suggest changes in the existing plan of education, a committee with Doctor Zakir Hussain as chairman was appointed. This committee was inspired by the ideas and ideologies of the Father of the Nation and after serious deliberations it produced a scheme which is popularly known as the Basic Education Scheme. This Scheme was approved by Mahatma Gandhi and was commended to the nation as the National Scheme of Education. This scheme has two aspects—the theoretical and the practical. Of these two aspects the theoretical aspect concerns the fundamentals of education and the modern researches in this and allied sciences. This aspect introduces a craft in the scheme of studies, and regards it as the centre of education. Fundamentals of other subjects are to be correlated with this craft.

Based on the psychological principles of play and activity, it enables children to "learn by doing" and provides concrete experiences of the most important life situations under a sheltered atmosphere. Learning from books is reduced to the minimum and emphasis on creativity is immensely increased. Instruction thus imparted appears meaningful to the child and becomes real and worthwhile. It also becomes need-centred and community-centred because children are made more and more conscious of their needs and those of the community. It also encourages co-operation in place of competition by emphasising group activity and abolishing inequality.

The practical aspect of the scheme presented a solution to the many problems of Indian Education. The scheme envisaged free and compulsory education through the medium of the mother-tongue for all children between the ages of 6 and 14. Keeping in view the poverty of the country it was suggested that it should be self-sufficient and self-supporting. Critics have been rather unfair in regarding this as the *sine-qua-non* of the educational philosophy and practice of Mahatma Gandhi but later reflections have brought out the fact that this principle was introduced lest extreme poverty of the country should stand in the way of sufficient money to finance one of the biggest educational projects in the world. Gandhiji realised that, like justice, education delayed will be education denied and that is why he laid down that as high a part as possible of the expenditure on education be met by the productive activity of the pupils.

The idea of introducing a craft and making it the centre

of education is really superb. This not only enables the children to learn a useful vocation but can be utilised for cultivating the mental, physical, emotional and spiritual aspects of personality. In the words of Gandhiji, "The plan to impart Primary Education through the medium of villageshandicrafts like spinning and carding etc. is thus conceived as the spearhead of a silent social revolution fraught with the most far-reaching consequences. It will provide a healthy and moral basis of relationship between the city and the village and thus go a long way towards eradicating some of the worst evils of the present social insecurity and poisoned relationship between the classes."

The theoretical bases of Mahatma Gandhi's Scheme of Education are unassailable. There can be nothing more desirable than the introduction of free and compulsory education and the substitution of the mother-tongue in place of the foreign language. The shifting of the centre of education from the book to some important suitable basic craft is also admirable as it enables the pupils to learn by developing teaching-learning-living units of work instead of merely listening to teachers and memorising extracts from text-books. The choice of the craft, moreover, is not to be unduly fettered—it is to be pretty wide—the only criteria for a suitable craft being that it should be rich in educational possibilities, should be correlated with life easily and should have the local conditions in its favour.

In assessing the contributions of Mahatma Gandhi in the field of education, K. D. Ghose says, "Where Primary

School was cheerless, soul-killing and bookish, wholly confined to symbols, he made it joyous and creative, free from the shattering shackles of dead, useless, unwanted information. Where it was completely divorced from life, he based it on real work connected with the child's social and physical environment. Where personality was lacking or was never a by-product of education, he sought to create it through ceaseless and varied activity which would foster a life of the right values—values like truth, goodness and justice—the foundations of all spiritual personality and character. Where the rural folk after a smattering of English language, drifted to the town unable to resist its lure, he devised a system that would keep the vast majority happy and contented in the bosom of the village. Where education was god-less, he sought to create a devotional attitude through songs, prayers and hymns, but more particularly through the child's daily living of life and the attitude that he was to have towards his work and activity. Lastly, where education was hopelessly defective in quantity, he sought to bring it to every door and every home by a not too impossible self-supporting scheme."

This shows that the scheme of education inspired by Gandhiji has great potentialities and powerful possibilities. It is philosophically, psychologically and sociologically sound and is not only in accord with the latest trends in educational theory and practice, but is in harmony with the intrinsic genius of the people and the inherent soul of the Indian society. But it would be wrong to conclude from this that the scheme is without any limitations. There are some grave dangers

which have to be carefully guarded against before implementing the scheme.

The first of these dangers is that an overemphasis on craft might make the coming generations more materialistic. By virtue of the excessive time devoted to craft work in Basic Education, there is a likelihood that the pupils might tend to regard the craft as the end and be all of education. This tendency would be strengthened further if the Basic Education teachers begin to consider the earning of livelihood as the supreme aim of education. The danger, it should be noted, does not lie in introducing the craft as the medium of education but in giving it an undue and exaggerated emphasis.

Another pitfall in the scheme is the narrow notion of correlation. Making a fetish of it would be defeating its very purpose. Correlation, it should be remembered, is not to be forced, coerced or far-fetched in any way ; it is to be natural, spontaneous and unconstrained. Moreover, it is not to be restricted to the day's work in the craft but is to be extended to the day's activities and experiences and to the lives of the pupils—past, present and future. In certain quarters the belief has been current that such items of knowledge as cannot be correlated with the day's activities or experiences need not be learnt by children. This is also wrong. Gandhiji foresaw the danger in this narrow interpretation of one of his fundamental ideas and he said in answer to a question at the Wardha Conference in 1937, "What cannot be taught through a craft should not be left out. We shall teach as much of these subjects through the *takli* or any other basic craft as possible. The rest we cannot leave untouched." The principle,

however, has been misinterpreted in many a case and sins have been committed in the name of correlation to such an extent that correlated teaching has become a mockery. Some of the schemes of correlated teaching and those of correlating correlation are instances in point.

Still another limitation of the scheme is the widely prevalent feeling amongst the enthusiasts that the last word on Basic Education has been said and that they know all about it. This attitude of self-complacency has done irreparable harm to the important cause and if it persists it is bound to spell further disaster. Experimentation in the field of Basic Education is absolutely essential not only for its further growth but also for inspiring greater confidence in the minds of those teachers who have had no opportunities of coming into direct contact with it.

Finally, there is the problem of teachers and this problem presents the greatest obstacle to the spread of the Basic Education Scheme. This scheme envisages a new approach and a new philosophy and as such it requires a special type of teacher. These teachers should not only have attained a particular standard of proficiency in education and in craft but should also have the necessary enthusiasm and zeal for breaking new ground, performing a new and difficult task and propagating an ideal which has been found to be philosophically, psychologically and sociologically sound.

These hurdles in the spread of Basic Education are real hurdles and sincere efforts must be made to surmount them. The scheme, moreover, has been accepted by the Union Government and it has been decided at the highest

level to change all elementary schools into basic schools. It has also been adopted in most of the States of the Indian Union and investigations and experiments have revealed the fact that children educated in Basic Schools are better equipped to fight the battle of life than children educated in traditional schools. These investigations, however, need some further research and careful examination.

We are, however, a bit sceptic of the policy of a national Government in adopting a particular system of education to the exclusion of all other systems. Our scepticism is due to the inherent danger in making a national policy of a particular method, however, superb and sublime it may be. This is because we feel that it tends to curb initiative, slacken experimentation and retard research on the one hand and encourage uniformity, increase monotony and enforce dead routine on the other. It might thus encourage wooden procedures and make education static and burdensome. The scheme, it must be admitted, has immense potentialities and possibilities and holds a great promise for national regeneration

Recently another bold step was taken by the State of Madras in modifying its scheme of Elementary Education. By this step, the duration of instruction in a Primary School was reduced to three hours per day and it was decided to have two sets of children in each school, the total number of working hours for the teachers remaining almost the same. This innovation doubles the number of places in the schools of the State and in fact it has been devised to meet the growing

demands of admission into the schools and provide increasing accommodation for increasing numbers.

This scheme met with a good deal of criticism from many quarters but ultimately the Government decided to go ahead with it. The criticism was so trenchant that even a vote of no-confidence was moved in the Madras Legislative Assembly on this score. The scheme does not intend a mere reduction in the number of school hours but makes provision for a different approach altogether. It lays down that the children should attend their school only for half the day and should assist their parents in their work or learn a trade as apprentices under local craftsmen, if facilities are available, or engage themselves in a craft or other activity at the school itself.

The scheme was initiated by Shri C. Rajagopalacharya, the Chief Minister of Madras, in 1952. Shri Rajagopalacharya was of the view that it was the duty of the parents to finish the first three or four years' tuition that every child required. The only exception which he thought he should make was in those cases where neither of the parent was literate. In his own words, "The business of educating the child in the three R's should be entirely the parents' responsibility, if one or other or both the parents were educated. It is wrong, wasteful, and irrational to spend money on this. Parents who can afford and have the capacity to teach their children should not put the burden of elementary education on other people.....
.....A child whose father or mother is literate should be refused admission in the elementary school. That is my doctrine. I do not know when I will have the power to make such a fundamental change."

This is not the place to discuss the ideas of Rajaji but the scheme as it has been put into operation has some good points. In the first place, it solves the problem of providing additional accommodation for growing numbers. Secondly, it achieves this end without any extra finance. It requires no additional buildings or furniture, teachers or materials. Thirdly, it makes craft work compulsory for everybody and thus gives a practical bias to education. It also teaches the children dignity of labour and helps in bringing back the school to village and in taking the village to the school. This will also enable the educated people of the area to do better the work that the uneducated people are doing and thus add to the wealth and prosperity of the country. Manual work will, moreover, help in bridging the gulf between the rural and the urban, the high and the low, the white-collared and the down-trodden.

Finally, it helps in defining clearly the objectives of schooling and removes the confusion which has existed in the minds of some people in this respect. It draws a clear, decisive and precise line of demarcation between the aim of schooling as a training for livelihood and schooling as training for general enlightenment by acquiring permanent literacy. In the past both these objectives were to be achieved by the schools but the Madras Scheme shares the responsibility between the home and the school. The objective in respect of training for livelihood becomes the responsibility of the parents and the local community whereas the responsibility for imparting literacy devolves entirely on the schoolmaster.

This differentiation in objectives means that it will be essential to adopt a fresh approach towards school organisation and teaching methods. It will encourage learning not from books but from active participation in the life of the local community. The teacher will, moreover, be dealing with children who are gaining purposeful experience from places other than the school. He will have to deal with them as individuals who are alive to their needs and requirements and have rich experience and valuable learning to their credit.

It is thus evident from the above that the introduction of the scheme will be beneficial in a number of ways. It will open a way whereby the objectives of the Constitution with respect to universal elementary education could be fulfilled. But it should be remembered that a careful coordination between the two agencies of education is absolutely essential. If this is absent or is not of a high order, the scheme will miserably fail and spell disaster for the people. The average parent should realise that by sending his child to the school, he has not to lose anything but something to gain. Similarly the teacher should also realise that his pupils are receiving education through other sources. In such cases where the "other sources" are not doing their part satisfactorily, the State should make proper arrangements in the schools. This is absolutely essential because ultimately the responsibility for imparting education to the children of a Welfare State devolves on the State and not on the individual parents.

In the above pages we have discussed the methods suggested by different educationists at different times to improve

education. It is evident from these discussions that no method has merits and merits alone. This in fact is the main reason why so many methods have been suggested from time to time. For instance, at one time the Kindergarten Method was supposed to solve all the ills of Education. Then came the Object Lesson and towards the close of the last century Herbartian steps reigned supreme. They were followed by the Montessori Method which in turn gave place to the Problem Method. A few years later the Project Method promised to place the Alladin's lamp into our hands. But then the individual differences came into the forefront and individualised instruction in the form of Dalton Plan promised to solve the difficulties. Similarly the Platoon Plan, the Decroly Plan, the Activity School, the Child-centred School, the Craft-centred School, Supervised Study have all been suggested at different times by different persons in different countries.

In this shifting terminology, therefore, a teacher has to be very careful. In our opinion no teacher should enslave himself to a particular method. He should not be carried away by the glamour of a method only because it is a "new" method or reject a procedure which has worked in the past only on the ground that it belongs to the relics of the past. He should apply himself in all earnestness to a study of the different techniques, plans and methods advocated from time to time and taking into consideration their good points evolve a method of his own. It is this composite method which will bear his own personal stamp and will be most appropriate to his own philosophy, personality and genius. Just as each

writer has a definite style of writing, similarly each teacher, will have a definite style of teaching—style peculiarly his own. But whatever method he might adopt he should be valuing natural activities and interests over artificial and unmotivated tasks, child's purposes over teacher's impositions, easily discoverable present needs over unknown future needs, active and critical thinking over memorisation and passive reproduction, real life experiences over formal learning and development of attitudes and habits over mere imparting of subject matter and information. These principles will find expression largely in play-way at the Nursery and Infant stages, play-cum-work activities in Primary and Secondary stages and in heuristic attitude during the University stage.

Chapter VII

Devices

WHEN a teacher faces a class he has to teach. Young enthusiasts of the profession regard teaching as tantamount to telling. They think that if they can explain things well, they can make a good job of teaching. Such enthusiasts, and unfortunately there are a good many of the type in the profession, regard their pupils as passive recipients and consequently fail in their mission. In the words of David P. Page, "A passive recipient is a two gallon jug. Whenever the teacher does not first excite inquiry, first prepare the mind by waking it up to a desire to know, and if possible to find out by itself, but proceeds to think for the child and to give him the results, before they are desired, or before they have been sought for, he makes the mind of the child a two gallon jug, into which he may pour just two gallons, but no more. And if day after day he should continue to pour in, day after day he may expect that what he pours in will run over."

This discerning statement was made by the author more than a hundred years ago. But it brings out admirably the need of waking up the mind of a child to a desire to know and if possible to find out by itself. This indeed is the primary function of a successful teacher. In the words of Joseph Payne "The teacher's part in the process of instruction is that of a guide, director, or superintendent of the operation by which the pupil teaches himself." These operations, popularly though erroneously known as tricks of trade, are in fact tools of the trade and are called devices of teaching. The success of a teacher depends on the successful use of these devices.

“Explaining things well, “it must be admitted, is the most fundamental device at the service of the teacher but it has to be supplemented by other devices and illustrations, paintings, drawings, dramatics, debates, discussions, field-trips, carvings, are all examples of such other devices. The necessity of using other devices is not new but has existed for a long time in some form or other. They have, moreover, not been restricted to the four walls of the class-room or the precincts of the school but have extended far beyond the campus. The society itself realised the importance of “unconscious assimilation” from such devices and utilised them in different places and in different ways. Pythagoras, for example, used to draw figures on the ground to make his ideas clear to his pupils. In our country the paintings of Ajanta, and Ellora, the mythological carvings of the Hindu temples in Banaras, Trichinopoly and elsewhere, the wall paintings in the caves of Elephanta and so on were all used to illustrate the spoken word. Nor can we forget the devices in the shape of morality plays—the ritual of festivals, Ram Lilas and Ras Lilas.

It was a condemnation of formal education that made Cobbet declare more than a hundred and fifty years ago that the most valuable part of his education had been derived from helping his father on the farm. While disapproving and decrying formal education, he incidentally showered approbation and showed admiration for the kind of education that one unconsciously absorbs and assimilates from the environment. The importance of formal education is, no doubt, on the

increase. But those teachers who depend merely on "telling" and "explaining things" have been guilty of innumerable mistakes. They forget that many times their pupils fail to understand the word spoken by their teachers and the school boy howlers are so well-known all the world over. The case of the boy who defined equator as "a menagerie lion who goes round the earth" is so well-known. The boy could not appreciate the idea of an "imaginary line" going round the earth and so he managed to think of a "menagerie lion" doing the job. Similar is the case of a young teacher who came across the word "anecdote" in the course of his teaching and he explained it away by saying "a short tail". He gave out the meaning of the word and proceeded on taking it for granted that he had been properly understood by everybody. He laboured under this illusion till he found in the composition of one of his pupils a sentence, "A rabbit has four legs and an anecdote." These instances are not uncommon and teachers must be on their guard in making use of this device in and out of season. Every teacher must have experienced this waste of time and effort on his part and must have felt oppressed at this experience.

This disease of verbalism, we have to remind our readers, is not confined to schools only—it is present inside the schools as well as outside them. In case of young and immature teachers, however, the incidence of this disease increases manifold. It is, therefore, extremely important for every teacher, man or woman, young or old, mature or immature, experienced or inexperienced, to realise once for all, that he is

not a purveyor of information. He is, in fact, a vitalizer of subject matter. He should, therefore, treat the subject matter in such a way as to bring it to life and grip the child and lead him on to new ways of thinking, feeling and acting. He should also remember that the best type of learning takes place when it is properly motivated and the children are challenged to put their best foot forward. "Learning by listening" must, therefore, give place to "learning by doing". The teachers have also to realise the all-important fact that the most fundamental pre-requisite for guiding the learning activities of school pupils is to give up the time-honoured practice of remaining at the helm of affairs in the class. They should instead join the group and regard themselves as ordinary members thereof. This step alone will go a long way in the teacher being regarded as one of the group and he can thus use his resourcefulness, insight and initiative to guide the activities of the group without giving them the idea of dominating the group, imposing his own will on them, restricting their lines of action or chains of thought in any way whatever. The planning in such cases does not rest with the teachers alone but belongs to the group. The group experience is a vital experience and very far-reaching in its effects.

In our schools and other places of instruction the slate and the takhti are the oldest devices which were made use of. These two instruments of education have been utilised by innumerable numbers and most of us must be remembering them with mixed feelings of joy and despair. There have been some educationists and administrators who decried their use

on grounds of health and habits. But there have been others who advocate their use on grounds of simplicity and cheapness. Without considering the desirability or undesirability, suitability or unsuitability of these aids in facilitating realisation of educational goals, it cannot be denied that they had and are still having the greatest instructional usage in our country. Though takhti has not been known in many western countries, yet the slate has been recognised and used practically all over the world.

Another universally recognised and widely used device has been the black-board. It has been called the teacher's best ally and it is difficult to imagine a class-room without a black-board. The uses of a black-board are manifold as it gives immense opportunities to a resourceful teacher to illustrate his lessons. Not only this. It helps a less gifted teacher also as it enables him to cover up his deficiencies and shortcomings by writing certain things or making some drawings on the black-board before teaching a class. With the passage of time its importance and utility has increased to such an extent that some supervisors never give much credit for a lesson in which the black-board is not profusely used. As a result of this importance, the size of black-boards began to increase and to-day one sometimes comes across certain schools where the black-boards occupy almost half the available wall space.

In order to motivate one's lessons, emphasis in the past used to be placed on text-books and questions, examinations and assignments. These devices are important and have an assured place in any scheme of instruction. But it must be

carefully understood that they by themselves are not enough to make learning purposive and meaningful to the pupils and unless this end is secured learning can neither be successful nor authentic.

Take the case of text-books for example. They have been very widely used and have wielded great influence in the domain of education. But it cannot be over-emphasised that a text-book must have some qualities and unless they are there it will be worse than useless. It should be clearly printed on good paper and strongly bound. The size of the print should be suitable to the age of the pupils and should avoid any strain on their eye-sight. Its volume, subject-matter and method of presentation should also be suitable to the age and mental level of the pupils. Its language should be simple, concise and clear. It should be attractive and should have plenty of illustrations in it. The illustrations should be suitable and relevant and be adapted to easy vision and quick grasp. It should be absolutely free from all types of mistakes and its contents should be up-to-date. It should not contain any matter which is meant for the teacher only and so is superfluous from the point of view of the pupil. It should contain references for collateral readings and suggestions for self study. It should be a real aid to the teacher to carry out his activities and supplement his work but should be strictly subordinate to his plan of procedure.

There is no denying the fact that text-books are a constant companion of many teachers and pupils alike. Some of them have high respect for them, but there are others who

just detest them. They, in certain cases, do render invaluable help to the pupil no doubt but they have also been found to exercise a strong measure of control, unofficial of course, on the curriculum and the activities of the school. Instead of serving the curriculum, they in most of the cases dominate it. In this way they not only prescribe what is to be done but also determine the way in which it should be done by providing questions, problems and projects to be tackled. Moreover, the way in which the subject-matter is treated in them is generally wrong from the point of view of the child. Where the psychological treatment is desirable and useful, the text-book sticks to the logical point of view. In short, a text-book is an excellent instructional aid but the moment it transgresses its limits and begins to dictate or dominate the curriculum it fails in its most fundamental objective of enriching the learning experiences of children.

Questioning is also a useful device available to teachers. Wise and judicious use of this device helps a teacher in a number of ways. Its use as a testing medium is so well-known as to need no further comment or elucidation. But this device can also be made use of to discover the foundations of the learner's mind and arouse proper apperceptive masses. It also helps in imparting new knowledge, establishing new relationships and educing new principles.

Most of the questions which we as human beings ask are natural questions. In other words they are asked with the sole purpose of eliciting some information which is lacking. The questions asked by the teachers, as a rule, belong to the

category of formal questions. They are not genuine questions because their purpose is different from making a query or collecting some information.

A good question should be clearly, concisely and tersely worded. It should be specific and definite. It should, moreover, be stated in as few words as possible and should not admit of any ambiguity or doubt. The language should be intelligible to the pupils and all difficult and unusual terms should be avoided. It should stimulate mental effort and should arouse pupils, setting them to observe, think and remember. It should, moreover, be asked in a pleasant manner and should not be repeated unless there is a genuine need for it.

Questioning is an art and it requires all the skill of an expert to handle it properly. Teachers have often been observed to make silly mistakes in this respect. They are sometimes found to be guilty of asking questions when they should be explaining facts and explaining facts when they should be asking questions. This is not all. Sometimes they make use of the wrong type of questions and thus waste not only their own efforts but also those of their pupils. Sometimes the manner of asking a question is wrong. A teacher who names a pupil and then puts a question has to blame himself for developing inattention on the part of his pupils.

The setting of examinations is also a useful and time-honoured device at the disposal of the teacher. They are regarded as essential because they assess or evaluate the achievements of pupils and help in separating the wheat from

the chaff. They are also used to certify the satisfactory completion of a course of education, select candidates for admission to higher courses, rank the candidates in order of merit and test the efficiency of teachers and institutions, besides providing incentives for harder, superior and thorough work on the part of the candidates.

The conventional system, however, has been vehemently attacked and the attack has emanated not from one quarter only but from diverse quarters. School masters denounce them for their harmful influences on school work; parents denounce them for their extreme subjectivity, unreliability and invalidity; and educationists frown at them for their indefiniteness in aim and purpose. This is why they have been called as "blood-suckers," "begetters of rivalry and strife", "enemy of true education", "an obstacle to learning", "a growing tyranny", "a glorification of memory" and "a presumptuous attempt to gauge the depths of human ignorance."

These are some of the epithets attributed to the time-honoured device. The most fundamental difficulty with the system, as it exists to-day, is its inability and incapacity to perform any one function properly and crowning it with multiple functions, adds to its abuse.

In addition to these criticisms it has to be carefully borne in mind that the present system of examinations fails to bring out in bold relief the pupil's awareness of his own performance and does not give him an opportunity of competing against his own former self. It stresses intra-group competitions and comparative rankings besides orientating the candidates towards

mechanical routine. Avoidance of strain in case of the traditional examinations is unavoidable and production of emotional disturbances a frequent occurrence. Both these result in frequent examination fevers which are a reality and not a myth.

Whatever incentive they provide or the motivation they furnish is very short-lived, brief and transitory. In certain other cases even this temporary effect is absent because in the light of their past experiences pupils learn to rely on luck or mere chance to see them through the required examinations and this element of chance, it must be admitted, is too pronounced to escape notice.

The case of home assignments is not better in any way either. This kind of understanding is, as a rule, vague and lacks any unity of purpose or form. The assignments are undifferentiated and are devoid of any integration in studies whatever. As such they lead to haphazard recitations on the part of the pupils and lack any definite purpose or set plan. In addition, in most of the cases, it makes pupils work under unhygienic conditions and disturbs home life and leisure activities. It is interesting to point out that the protagonists of the idea, however, put forth the plea that parents are in favour of it, that the study hours at the school are not long enough, that it helps in fostering co-operation between the home and the school, and that it provides opportunities to children to work independently of the teachers and thus learn to stand on their own legs. But the advocates of the home study assignments tend to forget that parents want them, if they at

all do, to keep their children busy and out of the way. Moreover, if the study hours at school are regarded as insufficient, they could be easily lengthened with a provision of mid-day meals. Talking of stimulating co-operation between home and school is a proof of one's incompetence. There are much better ways of promoting such co-operation than the setting of home assignments. And finally in regard to the incentive to independent work, we must admit that they should, but the question still remains whether it is actually done and if so to what extent.

The use of these devices text-books, examinations and home study assignments is not only permissible but extremely desirable and essential. It, however, needs to be understood clearly that it is very easy to misuse them and in that sense their utility is all gone. Even a shade of overdependence on these devices will defeat their very purpose and enslave the teacher to harmful practices. A text-book, for example, should be used only for guidance and help and never for the twin purposes of determining the course of study or dictating the method to be followed. The moment it does so it fails in the realisation of the fundamental objective of inciting the curiosity of children and enriching their learning experiences.

Similarly the proverbial fear and tension that have accompanied the traditional examinations must become a thing of the past. These tests must become extremely informal and their aim and purpose should be clearly defined. In view of this, emphasis should be laid on diagnostic tests followed by remedial work. The purpose of holding them to plough some

students or down face them in the presence of the rest of the class is highly objectionable. All such tests as are open to easy misuse should be avoided. It should also be carefully borne in mind that both the types of test, essay-type and the new-type, have their place in the system and it would be futile to imagine that either of them can be sacrificed for the other. Those who are strong advocates of the new-type tests should realise that in actual practice these tests, as a rule, lead to just mechanical types of study especially because there are hardly any opportunities of organising one's thought processes. Moreover the line of demarcation between ceasing to think and starting to guess is very difficult to be drawn and as such they have very little effect upon learning. It is true that new-type tests of a higher type involving reflective judgment and comparisons can be made but it is a difficult matter and most of the teachers seldom come upto this level of attainment. The new-type tests, no doubt, discourage cramming and encourage thinking and observation. They can, moreover, be standardised and thus their objectivity can be increased manifold. But they do not bestow unmixed blessings on the teacher and suffer from their own shortcomings and defects as they do not test sufficiently the pupil's power of accurate and cogent expression and his abilities to organise his material.

The case of home assignments is also similar. The right type of assignments should develop the interests of the pupil, assist him in the direction of private study and should make him self-reliant. It should neither be mechanical nor require the help of a private tutor. Steering clear of these two extremes

it should be such as will "widen his mental horizon, broaden his sympathies, create new interests for him, deepen and extend the existing ones and also develop a taste for creative work. Home-work, in short, should be home-study and that from books not used in the class or in the school." This study, moreover, must have a central point or core to be developed and should relate to the pupils' interests and experiences. The home study should get a grip on the motives, impulses and interests of the pupil and so become meaningful to him. The one principle to be kept in mind in this regard is to satisfy oneself that the assignment will be most effective and fruitful in bringing about good learning. The kind of work set with a view to mugging up for the examination is worse than useless.

Learning without meaning or understanding, as has been stated in the foregoing pages, has little chance of being retained for long. It is, therefore, extremely essential to make all instruction intelligible to the pupils, give meaning to it and thus make it real and lasting. One way of doing this is to decrease the abstractness of instruction and make it as concrete as possible. As the child develops and his experiences grow, the degree of concreteness may be reduced and the level of abstraction may be progressively increased keeping in view the fact that only that level of abstraction is used in the class-room or elsewhere which is within the mental grasp of the pupils.

Moving from the concrete experience to the abstract symbol is not so easy as most grown up people generally think. In case of young and immature minds it is a most difficult

process and involves all the ingenuity of those entrusted with it. In the school world it brings into play all the talents, skilfulness and competence of the teachers. The abstraction, that may be vital to the adult, may be meaningless to the young boy or girl. It can be stated without any fear of contradiction that the greater the ease with which a teacher may help his pupils to proceed from the concrete instance or example to the abstract notion or generalisation, the better teacher he must be. It is, therefore, essential for the experienced and the inexperienced teachers alike to weigh all the relevant factors and adjust their procedures to them. The transition from the concrete experience to the abstract generalisation should not be sudden but it should be a slow process. A hierarchy of stages could be suggested for the purpose and it may be represented diagrammatically as follows :—



As depicted in the above diagram, direct experience forms the base of the hierarchy and involves learning by direct participation in the activity itself. It is an experience which involves direct observation of the original by the different senses. In other words it can be seen, handled, tasted, touched or smelled. This kind of experience, therefore, is the most easy to handle. But it should be remembered that one cannot live on this kind of experience always. For small children it is very desirable and object lessons, at that stage, are very useful. But in case of higher stages it is absolutely impossible to experience everything first hand. It has to be associated with or give place to substitute experiences and abstractions.

The second stage involves the use of contrivances like models, imitations and representations. A really good model, imitation or representation, in certain cases, is an excellent teaching aid because it explains the things better than the actuals or originals by focussing attention on main points and bringing them into the focus of observation one after another. Let us give an example in support of our contention. It is very difficult indeed to learn from an actual aeroplane the details about flying or various mechanisms involved in it. But a cut-away model will go a long way to explain clearly and simply the whole machinery and the mechanism of flying. During the war the army devised a number of such contrivances, popularly called mock-ups, for training its technical personnel and they proved very useful in imparting instruction to the freshers. In foreign countries some of the business firms use this device widely and their salesmen carry working models of their equipment for purposes of

exhibition and explanation to intending buyers. This device, it has been observed, helps the sales admirably.

The next stage in the hierarchy is "Dramatisation". It is also a device to reconstruct in time and space what occurred in the past. Historical events, for example, which happened in the past cannot be lived by individuals but dramatisation can go a long way in making the events real and enabling others to appreciate them in a much greater degree than otherwise. In this way it helps in re-living the experiences of others and in annihilating the boundaries created by time, distance and place. This device is especially handy in such circumstances as preclude the possibility of devised experiences or contrivances. Like devised experiences, dramatisation also sometimes scores over actual objects, things or situations by virtue of its being in a position to eliminate elements of less importance, doubtful veracity or unreal skill and items as are difficult of comprehension. It can also lay greater emphasis on those items or aspects as are important and focus attention on them.

Dramatisation provides a substitute experience not only to those who are participating in the play but also to those who are watching it. But it is obvious that the observers are not participating in it to the extent to which the artists are doing. In this way the artists are in a better and happier position to re-live the experiences more fully and abundantly than mere observers.

Another device which helps in arriving at generalisations or abstractions is "Demonstration". This device consists in

showing to the pupils the way in which things are done. It may be the way in which some gadget is handled or an experiment is performed, a problem is solved or a game is played. In the course of demonstrations, it should be noted, the pupils or spectators simply watch and listen as they are not responsible for what is happening and do not have either the ability or the authority to make any alterations in the procedure. Demonstrations, as a rule, are followed by exercises requiring the pupils to repeat what has been shown to them and do that in the way in which it was shown. The success of this device, therefore, depends on two factors—careful observation and faithful imitation. This device is extremely useful in the teaching of mechanical arts where the learner has to follow slavishly a good model and the margin of originality left in them is very little indeed. In case of fine arts also the case is similar for young learners. The advanced students of fine arts, however, are on a different footing altogether. For them initiative and originality are valuable watchwords and copying or strict observance of rules is veritable death.

Educational trips comprising field trips, journeys, excursions and other similar sensory experiences come next. They add to the amount of knowledge and provide valuable experiences to students at every level of learning from childhood to maturity. These trips and journeys, however, will not be of much use unless careful and definite plans are drawn up in advance for and about the visit. These trips, moreover, should not be regarded as ends in themselves but only as means to ends. This means that they cannot be complete learning

experiences in themselves but must either precede some special programme or provide occasions for some follow-up work.

The next stage in the hierarchy is that of pictures. They may be divided into two categories—still pictures and motion pictures. The category of still pictures includes not only photographs but pictures projected on a screen by a slide, strip or otherwise. The use of still pictures was formerly restricted to photographs only but now magic lanterns, epidiascopes, film strip projectors and microprojectors are being increasingly employed in the service of education. These devices are extremely useful in enabling a group to see the same thing at the same time besides giving an opportunity to the teacher to explain the important points by drawing the attention of the group to the magnified picture. The projected picture, moreover, can be kept in view for any length of time.

In the case of the magic lantern, glass slides for projection have to be prepared in advance but the case of an epidiascope is different. It can be used to project a picture, map or diagram straight from the printed sheet to the screen. Film strips are rolls of 35 m.m. film each containing a number of strips popularly called "frames". These frames are a collection of pictures on some particular subject or topic and they are arranged in a particular order. Their number usually varies from 12 to 50, the average being 25. They are available on a large number of topics and are accompanied by proper titles and carefully prepared descriptions. This device, therefore, obviates the necessity of selecting slides or getting them

prepared when needed. The teacher, however, preserves the right to show all of them or some of them as he pleases besides determining the length of time for which each 'frame' should be projected on the screen.

Motion pictures are also increasingly used as a device of teaching. At one time they were thought to be meant for recreation and amusement only but now it has been realised that they are an indispensable means of education and instruction. The great scientist, Thomas A. Edison, was so enthusiastic about the potentialities of films as instruments of education that he once said, "The only text-books needed will be for the teacher's own use. Films will serve as guide posts to these teacher-instruction-books, not the books as guides to the films. Pupils will learn from films everything there is in every grade from the lowest to the highest.....
.....Films are inevitable as practically the sole teaching method."

It would be wrong to suppose that the day predicted by Edison has come and that education at all stages and of every type can be imparted through the agency of films. The statement quoted above is in fact an overestimate of the situation and seems to be pretentious. Moreover, all films, it should be noted, are not educative. The average type of the film is made primarily for entertainment, not for education, and those who go to witness it do so not for learning from it but for entertaining themselves. There are, however, a number of instructional and documentary films

available which have been so planned as to achieve some educational goals.

Projected pictures score over unprojected material in a number of ways. In the first place, they can be seen by a large group at one and the same time and in this way they afford the group ample opportunities of seeing things and talking and thinking about them together. Secondly, they are magnified in size and, therefore, can be seen more clearly and appreciated more fully. Thirdly, they provide interesting breaks in the routine of teaching and as a rule provide different approaches to the same problem. This variety of procedure is bound to help individuals in their understanding of the problem and appreciating its many-sidedness. Finally, it leads to greater attention on the part of the members of the group and affords them opportunities of continuous vision and avoidance of distractions as far as possible.

These advantages are one side of the picture. The projected pictures suffer from two main disadvantages. In the first instance, they have to be projected in a darkened room and, therefore, it is not possible for the observers to take down any notes forthwith. Secondly, they ignore vast individual differences and make only group approach possible.

Motion pictures are, in certain respects, better than still pictures. They can reconstruct the past and bring the distant thing into the class-room easily, besides controlling the rate of motion. Slow motion film is very useful from the instructional point of view because this will make such processes visible as cannot be seen by the naked eye. But

it is not possible in case of a motion picture to skip over some scenes or to devote more attention to some and less to others. It is not possible to change the sequence either as it can be done in case of strips and slides.

It is, however, absolutely essential that pictures, whether still or motion, should be carefully selected if some educational benefit is to be drawn from them. They should be strictly relevant to the topic in hand and be suited to the psychological development and social background of the group with which they are to be used. Careful selection, moreover, must also be supplemented by a skilful follow-up. It should be in the form of general observations or comments or answers to specific questions or discussion or may even be a kind of general evaluation. Showing a picture, slide, strip or film, it should be clearly borne in mind, is only half the process. It must be preceded by proper "preparation" and succeeded by proper "follow-up". In this way it has to be related to what has gone before as well as to what has to come next.

The use of television may also be grouped in this category. In some foreign countries this technique has made rapid strides on the path of progress and its sphere of influence has extended to the field of education also. In our country, however, it has not yet been given a beginning. Its potentialities, however, are great. One research study in the U.S.A. revealed that school pupils who had television sets in their homes spent more than 23 hours every week on televiewing. It is tantamount to visiting pictures every evening. In

view of its popularity its value as a medium of mass-communication can better be imagined than described.

Gramophone and the radio are also valuable devices. These devices, however, make use of the audio media instead of the visual media. The gramophone and the radio, it must be borne in mind, are not very old in so far as their performances as teaching aids are concerned. The gramophone was used for the first time towards the end of the first decade of the present century, whereas the radio was introduced in the beginning of the third decade only. But the potentialities of audio-aids are immense—so much so that instead of the proverbial 3 R's the Americans talk of 4 R's—Radio being the 4th R added to the proverbial 3 R's.

These devices were also developed primarily as instruments of entertainment and recreation and were used only for amusement. But with the passage of time their field of influence was extended and leaving aside the recreational field it now covers social, political, industrial and educational spheres also. This influence is not in the form of a mere innovation or diversion but is deepening and developing in other spheres and is more firmly established today than ever in the past.

The uses of gramophone are so numerous and so varied that it is now regarded as an indispensable adjunct of every school. It can be used for introducing some units of study, orientating it, creating interest in it and motivating it properly. It can also be used to illustrate facts, events, concepts, phenomena and so on and thus enrich class-room activity. In this way a gramophone is especially useful in the teaching of music and

languages—subjects which require a good deal of emphasis on speech making and voice production. A teacher can place excellent models of pronunciation, intonation and articulation before his pupils at practically little cost and but for this innovation the cost of bringing good models to the class-room for purposes of illustration, imitation and emulation would be absolutely prohibitive. The recording, it should be noted, is superior to the living model in three ways—first, it can be used at any time; secondly, it can be used any number of times; and thirdly, it can be listened to in advance and the knowledge thus obtained can be made use of for purposes of proper orientation and illustration of the topic in hand.

A tape recorder is another useful device at the service of a teacher. It is an instrument which is used to record speeches, songs or music and these may be played back at any time and any number of times. If some piece or selection is not needed after a particular time, it may be erased and the tape used for recording some other message or speech. This device will prove especially effective in developing worthwhile standards of correct speech by providing opportunities to the pupils to listen to their own speeches as compared to the speeches of respected and well-known personalities.

School broadcasts provide another valuable and far-reaching audio-aid. The uses of a radio are more or less similar to those of a gramophone but much more variety is possible in the case of the radio than in the case of the gramophone. It also provides us with opportunities of listening to important events first-hand besides helping us in

keeping our knowledge of recent events, happenings and findings of research up-to-date. Moreover, those persons who deal with different topics from the broadcasting stations are specialists in their fields of activity and as such are in a much better position to make their subject-matter real and breathe life into it than the school teachers who have to deal with a number of subjects. It is also possible with the help of broadcasts to bring action and dramatic feeling into the class-room and depict the atmosphere as it actually prevails or prevailed at the time of the happening. Its appeal extends to large numbers simultaneously and that also at a very small cost. Finally, it provides a simple and necessary training to everybody, young or old, mature or immature in continuous listening. There is no subject which cannot be dealt with on the radio to some extent but it should be noted that some of the subjects as history, geography, science, languages, music and current events are specially suitable and adaptable for treatment on radio. It might be interesting to point out that the limitations from which school broadcasts suffer in case of certain subjects as skills will vanish with the development of the television.

It is easy enough to introduce the new media of gramophone, tape recording and radio into the class-room but it needs a lot of planning and discrimination to derive maximum benefit from them. This is primarily so because all records, recordings and broadcasts are not educative—most of them are meant for entertainment and recreation. It is, therefore, absolutely essential for the teachers to select their

broadcasts carefully and see that they are relevant to the topic in hand, appropriate in content and suitable to the level of mental development of their pupils. A particular programme may be suitable for a particular age-group, but no programme can be suitable for the whole school as such. Mere selection, moreover, is not enough. Radio listening, it should be remembered, is an art and needs proper training, direction and guidance. Radio provides only one-way traffic between the pupil and the teacher instead of the more desirable and educative two-way traffic. The class or the group can only "listen-in," they do not have the option or the opportunity to fire a question, ask for elucidation, make a comment, request for meaning, interpretation, explanation or details. If a doubt arises in the mind of the listener during the course of the broadcast or a particular point is not clear to him, he cannot talk back to the speaker but has to wait for the broadcast to finish and only then can discuss it with the teacher or with the members of his group provided he has not forgotten it by the time. A broadcast, moreover, is not to be considered as complete in itself but is to be regarded as a part of the teaching process. In other words, the job of a teacher is only half-done if he has provided his pupils with an opportunity of listening to a broadcast. This opportunity must, in the first instance, be preceded by explaining to the students the nature and substance of the broadcast, and when it is over, time should be provided for some kind of follow-up work. It may be a free discussion of the broadcast as a whole or some particular and important part of it, it may be writing out answers to some

questions pertaining to the broadcast, or the subject may be pursued further by independent study and investigation, references for which should be given out. This kind of self-educative activity is the very life and soul of radio programmes. The listening experience should not come as a mere relaxation or as a sudden switching-over from one activity to another but the pupils should be properly and carefully prepared and they should be psychologically ready for the new experience. They should be led to listen for something definite, something which will meet their felt needs and answer the problems which they have been facing for some time. In this way a broadcast should be regarded as an aid to teaching, not a substitute for it. It is merely a device to provide variations in teaching techniques with a view to making them more lively, vivid, thrilling and vital. If a broadcast does not clarify, enrich or supplement the class-room work, it is a mere waste of time and effort and not a teaching device at all. Finally, it must be considered as an assignment for further study—it should not only refer to a particular problem and provide enough material to meet its challenge but should stimulate the pupils to further activity, study, investigation, discussion and experimentation.

Now we come to the next category of experiences—experiences which involve symbols. When we speak of Asia as a continent or of the Atlantic Ocean, none of the aids discussed in the above pages will help us in showing either of them to the class. Here we shall have to show them a map, a globe, or a chart—more abstract representations of the original. Such illustrations as charts, graphs, maps, drawings, sketches,

posters, diagrams and other symbols of this type belong to this category. These symbols appeal to the visual sense and are, therefore, called visual symbols.

Visual symbols are widely used by all teachers without exception and those teachers who are fond of saying that they do not believe in visual education make such statements when they are off their guard. They tend to forget that when they make use of a map or a chart, a graph or a diagram, or even write or draw something on the black-board, they are resorting to the device of visual aids and thus making use of visual education.

Visual symbols could be used as a teaching device from the most elementary stages. But it is primarily important that these aids should be geared to the mental level of the pupils. It is felt by some teachers that they do not possess the ability to draw freely on the black-board. We would like to remark in this connection that this ability should be considered as an indispensable requisite of every school teacher and those teachers who feel that they can never be adepts in this activity are in a wrong profession. It is certainly true that many maps, charts and other illustrative materials are available in the market ready-made and admit of sufficient variety also, but it cannot be too strongly emphasised that the most useful and valuable drawings, maps, charts and graphs are those which are developed in the presence of the pupils. In such illustrations only those details should be filled in as are necessary and helpful for the topic in hand. The map that grows before the pupil's eyes is much more useful and valuable

than a well-finished map which contains many details—some wanted at the moment, others not wanted. It is in these circumstances that the ability to draw freely comes in most handy. This ability, some people are inclined to think, is God-given and that those who have not been given this gift of God have to remain without it for ever. But it is not so, it is a skill and as such it needs two things—a good deal of patience and a good deal of practice.

There are some points about such illustrations which should be clearly borne in mind. In the first place, each such aid should have a central point and should be presented as to focus attention on it. Secondly, these aids should not contain too much details. If they are in any way overdone, they will not remain aids any more but will blur the vision and act as obstacles to a clear grasp of the material presented. Thirdly, they should be attractive and carefully designed. Fourthly, they should be coloured but the colour, it should be noted, should not be regarded as an end in itself but should be introduced to make real-purpose of the same clearer and comprehension easier. Fifthly, the scale if any used in the map or graph or any other marking given in the chart should not be relegated just to one corner so as to be oblivious to the eye-sight but should be shown in such a way as to capture attention and be easily visible. Sixthly, the details given in the illustration must be precise, accurate, to the point and up-to-date. And finally, an attempt should be made to see that the utmost simplicity is aimed at.

In regard to visual symbols it is interesting to point out that they can be made not only both by the students and the

teachers but that a number of them can be obtained gratis or at a very nominal cost by outside sources also. Business firms, tourist offices, travel-bureaus and many other offices and associations can be very successfully tackled for the purpose. A resourceful teacher will be surprised at the response that his request will meet in this connection.

Lastly come the verbal symbols which involve the greatest amount of abstractness, even more so than the visual symbols. Verbal symbols simply signify that a certain word stands for an object, action or thing. This category comes in the highest stages of abstractions because here we abstract everything from the original except the meaning of the term itself. The verbal symbols for example can be anything from a word or an idea to a formula and a philosophic aphorism. The range in this respect is limitless and extends from names of animals and ordinary things of everyday use to concepts like democracy, republic, oligarchy and ideas like truth, justice, equity, duty, morality and the like. It would be wrong to conclude from this that verbal symbols are meant for senior pupils only and cannot be used by junior pupils. It is certainly not so. As a matter of fact every child who reads and writes is made to use these symbols and he does so times without number. Even before reading and writing come on the scene, speaking provides many opportunities of making use of this device.

In the use of verbal symbols one has to be very careful. It often happens that pupils read certain things mechanically without in the least being aware of their meaning.

Sometimes they also reproduce from memory long extracts of prose and poetry without grasping their sense or understanding their significance. Such expressions of erudition and high learning are worse than useless. Reading is more than reproduction of sounds and symbols—it implies the dual process of putting meaning into words and then drawing meaning from them.

The need of introducing the multi-sensory aids in the domain of education is being increasingly realised. This is due not to their mass appeal only but because they enable the teacher to bring into the class-room experiences which otherwise it would be impossible to make use of. They not only stimulate instruction but motivate learning to a high pitch. The scope and extent of these aids is expanding everyday and to quote Professor McClusky ".....just as the rail-road, steam-boat and automobile have transformed the mode of life in the last century, and just as the extension of electric power and the development of aviation will reshape the life of the coming century, just as certainly will the radio, motion pictures, television, sound recording (musical and non-musical), cheap printing and similar devices change the cultural life of the masses and the technique of their instruction. The change is inevitable. Its arrival is only a matter of time and ingenuity."

The immense potentialities of the new aids as vehicles of instruction cannot be doubted but a word of caution is necessary in regard to their use. Some people think that in view of their increasing importance the day, when, they will supplant the teacher, is not far. This is an absolutely erroneous

and unwarranted presumption. Teaching is strictly a personal matter between the teacher and the taught and no apparatus, device or method can supplant him. In our opinion there is no such thing as audio-visual education, there are only audio-visual aids to education. As such the new devices, however extensive their appeal and intensive their motivation, have to be regarded as aids to learning only and their primary purpose is to provide variation in the techniques of teaching and thus vitalise teaching. They are merely supplemental devices at the disposal of the teacher to be used as and when he likes with the sole purpose of providing variety and variation in the treatment adopted, extending the frontiers of their knowledge, widening the already existing interests of pupils, and creating new interests. These aids have no content of their own but provide new media of instruction and expression and, therefore, should permeate all instruction.

It would be equally wrong to presume that the job of a motion picture or a broadcast or a slide or even that of a filmstrip is over as soon as a picture has been displayed and a broadcast has been listened to. The work of a teacher, in fact, begins where the picture ends or the broadcast finishes. This is because these aids have to be used as means to further activity instead of regarding them as ends in themselves. Moreover, they should not be so used as to develop passive receptivity in the pupils by virtue of their being interesting and entertaining. They have not to be used as devices of diversion but as stimulants to learning. It is also important to bear in mind that there should be no over-emphasis on

their use. They should be used not for the sake of using them but only when they are relevant to the topic, appropriate to the age and experience of the pupils and economical both to the teachers and the pupils.

Another reason which makes the use of modern aids absolutely essential is the extension of education to all people. This idea of education for all is, no doubt, the most revolutionary idea of our times and consequently implies revolution in teaching methods and devices. It has also to be borne in mind that the connotation of the term 'Education' has been broadened beyond expectation. Whereas at one time it was restricted to the fundamental skills, it now extends not only to how to think, but lays emphasis on how to live. It also lays emphasis on educating the whole man—body, mind, emotion and spirit instead of laying emphasis only on the mind at the cost of the other aspects.

In the previous pages we have discussed the tools of the teacher's trade with emphasis on modern innovations, popularly called the multi-sensory¹ or audio-visual aids. These aids have a long past but a short history and, therefore, it is wrong to presume that they are strictly new. The old teacher may not have been familiar with the motion picture, radio or television as media of class-room instruction but he certainly made use of drawings and charts, maps and pictures, and such other devices. He also invited persons from other spheres to visit the school and speak to the children besides

1. Though these aids are known as multi-sensory, they emphasise only two senses, the audio and the visual.

taking children out of school for excursions, field trips and so on.

It should, however, be borne in mind that just as there is no one way of bringing up babies, similarly there is no one way of using these devices for teaching purposes. Teaching, as we have stated times without number, is not mere telling or displaying some material, but it is a personal affair between the teacher and the pupil. It is, therefore, absolutely essential that any system of teaching must be elastic enough to admit of freedom in modifying techniques. There are hundreds, perhaps thousands, of such techniques most of which are the result of the teacher's own thinking, initiative and resourcefulness. A teacher may be adept in one device and a failure in another but whatever devices he uses should give variety, create interest, stimulate thinking, provide outlets for hidden talents, reveal their temperaments and prevent the teacher from always being at the helm of affairs and occupying the centre of the stage. It is said of William Johnson that whenever the household cavalry passed by in school-time, he would shout, "Brats, let's look at the army!"; and the class would rush out to stand and stare. It might be his idiosyncrasy or singularity but who knows even this thing might have helped his pupils in motivating their learning, developing new interests and shaping their personal destinies.

Chapter VIII

Examinations

THE Commission which was set up in 1948, under the chairmanship of Dr. S. Radhakrishnan, to report on Indian University Education and suggest improvements and extensions that may be desirable to suit present and future requirements of the country, has made the following observations in regard to examinations. It says, "We are convinced that if we are to suggest one single reform in University Education it should be that of the examination."¹ It continues, "We advisedly say reform although we know that, in India as elsewhere in the world, dissatisfaction with examinations has been so keen that eminent educationalists and important educational organisations have even advocated the abolition of examinations."² It finally concludes, "We do not share that extreme view and feel that examinations rightly designed and intelligently used can be a useful factor in the educational process. If examinations are necessary, a thorough reform is still more necessary."³

The Commission has, in the above extracts, pronounced its verdict on a very difficult but important problem and has made a very far-reaching suggestion. Examinations, whatever the nature and extent of their shortcomings may be, have to be mended and not ended.

1. The Report of the University Education Commission, Vol. 1:328, Manager of Publications, Govt. of India, New Delhi, 1949.

2. Ibid.

3. Ibid.

If we examine the process of education carefully we find that there are three major divisions of the process—first, the determining of goals or objectives ; secondly, the utilisation of methods and manipulation of materials and devices to achieve the objectives ; and finally, the evaluation and appraisal of the results obtained and the standards achieved.

Of these divisions, maximum attention has been given to the methods and materials of instruction. The determination of objectives, too, has claimed a reasonable amount of attention and thought, more so in theory than in practice. The appraisal of results, however, has been relegated into the background and assigned a very low position in the scheme of things. The inconsequential nature of this part of the process of education is evident from the fact that, till very recent time, the only instrument at our disposal for the purpose of evaluation was the traditional type of examination with its emphasis on rote memory and sheer reproduction. The concepts of measuring attitudes and emotions, interests and appreciation of the beautiful and such other behaviour manifestations have been conspicuous by their absence,

When we take into consideration the situation as it exists in our schools and examining bodies we find that the achievement of pupils is determined by a written essay-type examination. This system has been in vogue for centuries together and till quite recently it went on merrily on its way quite unmindful of its shortcomings and oblivious to its defects and weaknesses. Scepticism, however, started against it towards the closing years of the nineteenth century and the

criticisms against it since then have been mounting rapidly. We, therefore, now proceed to consider these criticisms and only at a later stage shall discuss the question of abolishing them altogether or improving upon the existing practices.

The first and foremost criticism against the prevailing system is that its objectives are not very clear. The main purpose for which examinations are held is to find out whether a candidate is fit for promotion to the next higher class. There is no attempt on the part of the teachers and no instrument at their disposal to measure whether he has actually learnt the stuff or whether he has merely vomitted the knowledge acquired from books ; whether it has been helpful in any way in developing a wholesome personality or whether it has been an obstacle to it. Examinations, we have to remind our readers, have many objectives to fulfil and functions to perform. These may broadly be classified into five main groups—diagnostic, prognostic, eliminative, stimulative, and auditorial. Before continuing our discussion of the weaknesses of the examination system, it would be useful to discuss these functions in brief outline.

(i) Diagnostic : It includes such objectives as determining the difficulties and variabilities of individual pupils, finding out gaps in their knowledge, discovering their shortcomings and weaknesses. It also helps in analysing their habits, determining their emotional balance and their attitudes to different activities.

(ii) Prognostic : It aims at determining the potential achievement of the pupils, discovering their special abilities

and predicting their future success in different fields of activity. Such a test does not measure specific achievement in any field but acts as a miniature preview of future success and potential achievement.

(iii) Eliminative: It aims at determining the minimum essential attainments and attitudes necessary for a particular course of study and thus separates those who possess these minimum essentials from those who do not possess them. In this way it serves as an efficiency bar to be crossed at a particular stage and is eliminative in character.

(iv) Stimulative: It aims at motivating both the teachers and the taught and spurring them to greater activity and harder work with a view to reaching a higher level of attainment and proficiency.

(v) Auditorial: It aims at serving as an efficiency audit—both of the teachers and the pupils. It not only points out defects in teaching and learning but also helps in comparing the extent of success or otherwise of a particular method or approach

These are the objectives that examinations have to fulfil. There is, however, no denying the fact that most of us seldom bother about these objectives. We are concerned primarily with one objective and one objective alone—the eliminative one, and if some other function is also performed or some other objective is also fulfilled, it happens in spite of us not because of us. The lack of unanimity about the objectives of education and the introduction of many new objectives have

also been instrumental in complicating the issues and making the problem of measurement baffling and difficult of solution.

The second complaint against the essay-type examination is that its assessments are extremely subjective. The results and outcomes of these examinations, it is said, depend to a very large extent on the moods, whims, personal preferences and idiosyncracies of the examiners and chance plays a most significant part in them. Edgeworth¹ was the first to draw attention to the element of chance in them. He was followed by other research workers, most important amongst them being Starch and Elliott and for about two decades the traditional system remained as the storm centre for much adverse criticism. The climax came with the results of the International Institute Examinations Enquiry. It was an enquiry organised under the auspices of the International Institute of Columbia University, conducted in different countries and financed from the joint sources of the Carnegie Corporation and the International Institute. The studies established the subjectivity of the essay-type examination beyond the least shadow of doubt and proved that these measurements were as bad and unreliable as measuring lengths with a rubber band. Just as the unit in the case of the rubber band changes with the amount of tension applied, similarly the marks of the examiners changed with their circumstances and moods.

1. Edgeworth, F.Y., The Element of Chance in Competitive Examinations, *Journal of the Royal Society*, 53 : 460—75 ; 1890.

It would be useful here to quote some experimental evidence available in this regard. Starch and Elliott¹ made 142 teachers score photostatic copies of an English examination paper and the scores out of a maximum of 100 varied as low as 50 to as high as 98. In another study the same investigators made 116 high school Mathematics teachers score identical photostatic copies of a Geometry paper and the scores out of a maximum of 100 ranged from 28 to 92². This procedure was repeated in social sciences and certain other school subjects and the results obtained were equally revealing.

Another study quoted by Philip and Hartog³ is still more revealing in bringing into limelight the subjectivity of marking. The examiners in this case were experts whose sole job was to allot marks to the scripts sent into their office. Seven of the examiners graded 48 English papers independently and the results obtained are tabulated below :—

Examiners	Fail	Pass	Credit	Special Credit
A	1	16	27	4
B	0	2	34	12
C	7	30	11	0
D	0	9	36	3
E	5	16	27	0
F	2	7	37	2
G	19	12	17	0

1. Starch, Daniel and Elliott, Edward C., Reliability of Grading High School Work in English, *School Review*, 20 : 442—457, 1912.

2. *Op. cit.*, 21 : 254—259, 1913.

3. Hartog, Philip, and Rhodes, E. C., *An Examination of Examinations*, p. 20 ; Macmillan Company, 1935.

It is evident from the above table that while one expert examiner failed 19 candidates, two of them did not fail even one candidate. This is not all. While one examiner gave special credit to 25 percent of the candidates, three examiners did not give special credit even to one candidate. Moreover, one examiner "B" had definite leanings towards lenient marking while "C" and "G" were unusually hard.

These studies, and many more of the same kind, have conclusively established the fact that the traditional examination is extremely subjective. In view of this, the estimate of even the most conscientious examiner can neither be final nor reliable.

The third shortcoming of the prevailing system is lack of validity. We shall discuss the exact meaning of this term in a later section but here it will suffice to point out that the examiners do not test the knowledge, ability or proficiency of a candidate in a particular field of activity. While doing so they tend to bring in a number of irrelevant factors as hand-writing, lay-out and neatness of the paper, mistakes of spelling, punctuation and grammar and a host of such other considerations which blur their judgments and affect the marking.

If we consider the various factors which are responsible for the subjectivity of scoring and variability in marking in the essay-type examination, we find lack of validity as the first and foremost cause. The variation in the standard of expectancy amongst different examiners is another important and outstanding factor. The problem of determining the

"zero" of measurement, moreover, has not been solved yet and this, too, adds to the subjectivity of scoring. A good deal depends on the moods of the examiner also. He may penalise the examinees for some mistakes on one day but not do it on another; or, he may penalise some pupils and not others and the penalties for similar mistakes may be different. Moreover, some examiners may by temperament be "easy" markers, whereas others may be "hard" markers. Personal prejudices and "halo" effect in the sense of previous impressions of examiners also play important parts in increasing variability. Differences in interpretation of questions and the variations in the values placed on certain aspects of topics or approaches thereto are other factors which in no case are less important than those stated earlier.

The ignorance of objectives, subjectivity of marking and the lack of proper validity are not the only drawbacks of the traditional examination. This system ignores two important aspects of education, the practical and the aesthetic, and tends to give undue importance to academic attainments. It also demoralises pupils and teachers alike—the former by creating an attitude of anxiety and tension in them and the latter by laying undue emphasis on examination results. It has also exerted a cramping influence on organisation and administration and has been instrumental in sacrificing originality for the sake of uniformity.

Besides the defects stated in the above paragraphs, the traditional examination suffers from some other drawbacks also. It has developed in such a manner and to such an extent

that it dominates the whole system of education. As a result of this, all instruction is confined to the prescribed courses and those forms of training which cannot be measured are neglected. The emphasis is not on genuine study but on the questions likely to be set at the examination. By extolling memory at the cost of intelligent grasp and original thinking, it tends to develop bad habits of study and thus affect the health of examinees—mental, moral and physical. It affects the relationship between teachers and pupils adversely and the aim of education is confused with and degraded to the passing of examinations.

The prevailing system, moreover, does not take the previous records of the pupils and the views of the teachers about them into consideration. Thus those who guide them and watch their careers over a number of years are completely ignored. The final certificate or degree is given to candidates not on the basis of their school or college records but by a body which knows the candidate not by name but by his roll number and assesses only what has been vomitted on paper during a particular interval of time. The reproduction of the material of the text-book or the made-easy and the notes dictated by the teacher are valued more than the development of many-sided interests and the cultivation of all-round and well-developed personality.

Finally, the dimensions to which these examinations have risen are not only extravagant but staggering. They literally employ an army of examiners who have to work at a very high pressure because the scripts are many, time is

limited and the formalities trying. The numbers simply defy proper arrangements and certain Boards and Universities have to arrange different shifts to control them.

It would be helpful to give some statistical information in regard to the rise of numbers. The Calcutta University Commission (1917-19) expressed deep concern at the rising numbers involved in these examinations. "The numbers," as the Indian Universities Commission Report (1949) has pointed out, "have gone on increasing while the character of examinations has remained unchanged. The total number of candidates in 1904 was 23800 in round numbers; in 1944, 36742 candidates appeared at this examination conducted by the Calcutta University alone; Bombay had in that year 32056 candidates, Madras 30588, and Allahabad 22262. In 1947, the numbers had increased to 60841 at Calcutta, 41092 at Bombay, 43823 at Madras and 33923 at Allahabad." Much water has flown since 1947 and in the year of grace one thousand nine hundred and fifty-five the numbers have assumed gigantic proportions—Bombay had 110453 and Allahabad 201751. The Punjab (former East Punjab) University, which was established in 1947 after the partitioning of the country, had 4771 students for the Matriculation Examination in 1948, whereas the number that appeared for the same examination in 1955 was 72389.

To sum up the criticisms against the prevailing system of examinations we might say that they have become ends in themselves, instead of being means to better education and healthier conditions of work. This is why text-books are neglected

and 'keys', 'made-easy's', 'digests' and 'compendiums' command the attention of examinees. This is not all. Test papers, Model papers and even guess papers are purchased and prescribed by certain schools as a regular part of their study courses. Recently we came across two sets of books for the Matriculation Examination—"One Week before the Examination" and "Fifteen Minutes before the Examination" series. These facts have been mentioned to show the direction in which we are moving. Instead of making efforts to develop the abilities, personalities and attitudes of young men and women, passing examinations, with honourable exceptions of course, has become the sole aim of our education and cram the only method.

The drawbacks of the traditional examination are not confined to our country alone. They are visible in other countries as well and they cast a deep shadow on the schools and other educational institutions. The International Examinations Enquiry Committee confirmed this in their report based on investigation in twenty-two countries. They concluded that "the existing examination systems seriously interfered with educational programme in many countries and that they greatly hampered good and effective teaching."

Let us now consider the factors which are responsible for putting such an undue premium on examinations. Of these factors, the close connection which has been established between employment and a creditable pass in the examination is most important. It has made the average parent take more

interest in the examination results than in anything else. The attitude of the selecting authorities for any kind of employment or for admission to a higher course of study is no exception to this rule—the examination results are the sole criteria. Consequently, the annual reports of educational institutions lay too much emphasis on examination results. Comparative statements pertaining to these results are a feature of such reports and sound more like a profit and loss statement prepared by a business concern than a review of educational progress and achievements. The teacher cannot remain immune from this atmosphere either and falls a prey to the examination craze. He makes use of such techniques as will secure better results in the final examination and thus bring greater credit and honour both to him and to his institution.

These factors rob examinations of their real value and give them unnatural bearings. As education is assessed in terms of success in examinations, there is the accompanying neglect of qualities—qualities which are more important but less tangible. Moreover, originality and initiative are curbed and specialisation comes at too early a stage.

We have discussed above the weaknesses of the traditional system of examinations. Some educationists have been so much disgusted with this system that they have advocated its complete abolition. But abolition of examinations will not lead us anywhere. Examinations provide us with a measuring instrument and measurement and evaluation are essential parts of the educative process. If the measuring instrument, even

though it is crude at the moment, is discarded, there will be no device at our disposal to fulfil the multiple functions assigned to the examination system. There will be no goal for us to achieve and no guide-post to show the way. There will, moreover, be nothing at our disposal to inform parents about the progress of their wards, discover gaps in the knowledge of our pupils, compare individuals, groups and institutions with one another and stimulate pupils and teachers alike to better, harder and more efficient work. In the words of Michael Sadler, "To close down examinations would be to give the signal for educational saturnalia." The policy of giving the dog a bad name and hanging him will not serve our purpose. Examinations are an absolute necessity and the only course, therefore, open to us is to improve upon our instrument of measurement and standardise it as far as possible. Ending the examinations will create more problems than it would solve—what is needed is to mend them and make them serve our purpose as means and not dictate them as ends.

But before we discuss the various ways and means of improving upon the system, it is desirable to discuss the criteria of a good test. A consideration of these factors will help us in assessing the effectiveness of a test and evolving better tests for our use. These criteria are as follows :—

(i) **Validity** : The validity of a test expresses the extent or degree to which it measures what it seeks to measure. For example, a test in a particular subject should measure the knowledge of the pupils in that subject and that subject alone. If it takes into consideration certain other factors also as handwriting, length of the answers, general layout and so on, its validity will be reduced. The extent to

which all the extraneous factors have been eliminated shows the degree of validity of the test. In this way different tests will have to be constructed to measure different kinds of ability in the same subject. For example, a test which is validly constructed to measure knowledge of Indian History will not be valid for measuring the ability of pupils to apply the knowledge of these facts to the interpretation of events of Indian History. Similarly a test which is valid for testing reproduction of knowledge will not be valid for testing reorganisation of knowledge. Different tests will have to be set for the two purposes if they have to be valid.

(ii) Reliability : The reliability of a test is a measure of its consistency and freedom from chance variation. It refers to the extent to which a test is consistent and accurate in measuring the elements which it measures. A reliable test will be completely consistent in scoring. In other words it may be measuring anything but it will measure it consistently. There will be no deviation in the scores if the test is given a second time or a third time under similar testing conditions.

The reliability of a test can be easily calculated by taking into consideration the pupils' scores on repeated trials of the same test ; equivalent forms of the test may also be used for the same purpose. The coefficient of correlation between the sets of scores will represent the degree of reliability of the test—the higher the correlation, the more reliable the test. It is easy to understand that reliability is an aspect of validity. This is so because by virtue of the concept itself a test which is valid must be reliable. The converse of this, however, is not true. A test may be completely reliable but least valid.

(iii) Objectivity : A test is said to be objective if the personal judgment and bias of the examiner have no effect on the scores. In the case of a subjective test, the score depends on the person marking the script but it is not so in the case of an objective test.

The objectivity of a test can easily be determined by a mere inspection of its form. If it admits of only one correct answer and the personal bias, opinions and idiosyncracies of the examiners have no place in it, it is an objective test; otherwise not.

The relationship between reliability and objectivity should be carefully understood. A test, if it is to be reliable, must perforce be objective. A subjective test can never be reliable. It would, however, be wrong to conclude from this that every objective test is reliable—it may be, it may not be.

(iv) Adequacy : It means that samples of knowledge tested or abilities measured should be adequate. In other words, the test should be comprehensive and the questions should cover a wide range—as wide as possible. We have to resort to sampling as a device because in measuring any knowledge, skill or ability, it can never be possible to devise so comprehensive a test as to measure every bit of it. Samples have to be taken here and there and the more adequate the sampling, the better the test would be.

The relationship between adequacy and reliability is also important. A test can never be reliable unless the sampling is adequate. But the sampling may be adequate and still the test may be unreliable. Why ?

(v) **Administrability** : It implies that the test should be such as is easy to administer. In this regard the points of view of both the teachers and the pupils have to be considered. The language should be easy and free from ambiguity, the directions should be simple and direct and the questions set should be within the range of pupil's ability. For teachers, considerations regarding economy of time and energy are important. If a test is difficult to give, it will require specially trained examiners and ordinary teachers will not be able to make use of it. It is, therefore, not only desirable but imperative that the tests should be such as can be administered easily and conveniently.

(vi) **Scorability** : It implies that the test should be such as can be scored easily, conveniently and without spending time on it. Tests may in fact be scored by clerks, assistants and other personnel. It will mean a lot of saving in time and energy. If it is difficult to score the answers or evaluate the results, the test will lose most of its significance. The provision of keys and stencils for purposes of scoring facilitates the work considerably.

(vii) **Comparability** : It implies two things—first, the test should be available in comparable forms ; and secondly, the norms should be available and they should be adequate. In the absence of adequate norms, it will not be possible to compare the performance of an individual or that of a group with the average performance of a similar group or grade and consequently the test would lose much of its significance. In case of standardised tests¹ norms and equivalent forms are, as

1. For a fuller discussion of this concept, see page 228.

a rule, provided but even in the case of informal objective tests such statistical procedures have been evolved as will make a comparison of results possible.

(viii) Suitability : It means the extent or degree to which a test satisfactorily serves the purpose for which it is used. A test should never be given just for the sake of giving it—it should have a definite purpose to fulfil and a clear goal to achieve. The objectives of the testing programme will also be extremely helpful in determining its form and deciding upon the follow-up work. It is the follow-up work which will add largely to the utility of the test and transform it into an effective educative instrument. A test, it should be noted, may be fulfilling all the seven criteria discussed in the above paragraphs and do so admirably but still be unsuitable for use in a particular environment or in a particular situation. It is the purpose and the purpose alone that will determine the suitability or otherwise of a particular test. This criterion in fact may be regarded as a key check on all the other criteria and be the final determinant of the test given.

In the above paragraphs we have discussed the criteria of a good test. There are eight criteria which have to be fulfilled and they are validity, reliability, objectivity, adequacy, administrability, scorability, comparability and suitability. As a student of education, you should apply these criteria to the traditional system of examinations and see the result. You will find that this system fails and fails miserably to meet these criteria. As a natural sequel to its weaknesses and shortcomings, new-type tests have been evolved to bring about improvements in the system.

In the new-type tests the forms of question and the response required are fundamentally different from those required in the traditional type. Such a test consists of a number of short questions which have to be answered by writing a word or a phrase, underlining or encircling one word from amongst a group of words or checking one answer from amongst a group of answers. The amount of writing in these tests is, therefore, reduced to the minimum. In view of this brevity of response, it is possible to sample a pretty wide range of material in a short space of time and instead of the usual five to ten questions to be answered in two or three hours, the new-type tests include from 30 to 60 items to be answered in about half an hour. Thus by covering the subject as fully as possible, the new-type tests offer better and more adequate facilities of sampling knowledge than the traditional type. An analysis of the errors in them will, moreover, reveal to the teacher the places where teaching has been defective or learning inadequate.

The scoring in the new-type tests is both easy and objective. There is only one correct answer to each question and as such the subjective factor is completely eliminated and the personal preferences of the examiners do not matter in the least. This adds largely to the reliability of the instrument of measurement besides enabling the teacher to check up quickly whether the previous knowledge has been properly retained. In regard to administrability it must be admitted that setting a question paper in accordance with the new technique is more difficult than setting one on the

traditional lines. Scoring the answers, however, makes up for the extra time spent thereon.

The different kinds of questions that may be included in a new-type test may broadly be classified into two types—Recognition and Recall. The multiple choice, alternate response and matching forms are the most common forms of recognition type. In these cases some responses are given and the responsibility for selecting the correct response lies on the pupil. This type of test, therefore, makes only an indirect demand upon the initiative of the pupil. The recall type, on the other hand, makes a direct demand on his initiative as he has to depend entirely on himself for the correct answer. These are the two main types of items in the new-type tests but between these two types a tremendous variety of other sub-types has been developed.

The different tests that are available in accordance with the requirements of the new technique may be grouped into three main categories and they are achievement tests, intelligence tests and personality tests.

Achievement tests are designed to measure educational attainment and are designed to cover a well-defined area of learning. Tests constructed to measure attainment of pupils in different subjects and scales developed for grading handwriting, composition, drawing and so on are included in this category.

Intelligence tests are designed to discover the extent of variations in the mental abilities of pupils and measure

their capacities for learning, thinking and reasoning. Intelligence tests may again be of two types—individual and group. The individual intelligence tests examine one individual at a time, whereas the group intelligence tests can be applied to a whole group at one time. Group tests, therefore, effect a great economy in time and effort. The results of individual tests, however, are more reliable and accurate than those of group tests.

Personality tests are intended to measure the traits of temperament and character. They are usually designed in the form of inventories and rating scales and, therefore, their approach is more qualitative than quantitative. Interests and attitudes are also measured in a similar manner. In recent years, however, projective techniques have also been developed to get at and probe into the inner life of the subjects. This is done by presenting unstructured material and unstructured environmental settings to the subject and he is given an opportunity for free expression. In this way he is off his guard when he is caught and consequently he unwittingly reveals his covert impulses and conflicts. Murray's Thematic Apperception Test and Rorschach's Inkblot Test are two outstanding examples of this technique. But it should be noted that it is not yet possible for us to evaluate this technique in an objective and unequivocal manner. The approach, however, is very promising. But it will remain suspect and its contribution will be negligible till we succeed in giving the subject's responses and our observations thereof an objective interpretation.

The new-type tests may in general be classified into two types—standardised and non-standardised. The two types do not differ from each other in respect of the nature of exercises set and the items included in them. But a test will be said to have been standardised if it fulfils the following conditions :—

(i) It should consist of exercises specially selected keeping in view the content of the course and the relative importance of different parts.

(ii) The exercises should be statistically evaluated in regard to their innate difficulties and the methods of setting the test and scoring it should be definite and objective.

(iii) Norms based on the performances of large numbers of typical pupils should be prepared and made available so that the tester should be able to make a comparative estimate of a pupil's ability in terms of different levels of accomplishment.

A test, therefore, will be said to have been standardised if the conditions under which it has to be given are standardised to ensure uniformity of procedure. Besides, norms have to be provided to evaluate and interpret the scores of individual pupils.

The functions of a non-standardised tests are to cover the work done by a particular pupil, group or class and reveal gaps in knowledge or performance ; but those of standardised tests are to compare a pupil or a group with other pupils and groups. A standardised test, therefore, is

extremely helpful in finding out a child's good points as well as his weak points by comparing him with other pupils in general of the same age. In progressive countries a number of standardised tests are available in the twin fields of educational attainment and intelligence. In regard to personality traits, however, we have yet to go a far way in giving meanings to our observations and interpreting the subject's responses in an unbiased and objective manner.

This, in short, is the progress that has been made in the field of measurement. The new technique is certainly an improvement over the traditional system. It is consciously and designedly a measurement. There is no guessing or groping in the dark. Marking is easy, objective and reliable and sampling sufficiently adequate. Besides, the knowledge acquired by the examinees can be assessed in a short time and without much labour on the part of the examiners. These tests also serve as valuable instruments in making comparisons of an individual with an individual, of an individual with a group, or of a group with another group.

In view of so many advantages the new-type tests are becoming increasingly popular in progressive countries. The U. S. A. especially has made most progress in this sphere. We in this country, however, are very backward still and no tests worth the name have been standardised so far. The Indian University Commission Report (1949) has made a very strong plea for the preparation, propagation and use of these tests in our educational institutions and by the different examining bodies. This reform, in fact, is long

overdue and it is hoped that suitable steps will be taken in the very near future to bring this useful device into service.

It must, however, be understood that the new-type tests are not an unmixed blessing either and, therefore, we do not advocate a wholesale adoption of the same. There are certain limitations and we now proceed to consider them.

The first limitation of the new-type tests is that the pupils do not get an opportunity of organising their thought processes. The old-type examination, in spite of its many defects, does offer many and varied opportunities to the pupils to make comparisons, draw conclusions, apply general principles to specific situations, and give explanations for certain results, happenings or events. These points are such as must be given due consideration in any system of testing but the new technique ignores them largely.

Secondly, there is always a great temptation on the part of the candidates to guess the answers. In case of such questions as permit of only two alternatives, random guessing will distort the assessment considerably and consequently present a wrong picture of the candidate's ability, skill or knowledge.

Thirdly, the new technique has been objected to on psychological grounds. In these tests some wrong facts, incorrect statements and false answers are presented to the pupils. This is regarded as psychologically and educationally unsound as the young minds are very suggestive and there is a likelihood of such statements being accepted and absorbed as true and correct.

Fourthly, the tests measure only the trivial aspects of ability. These tests are only details of information and fragments of knowledge. There is no scope for the examinee to show his actual grasp and real understanding of the subject.

Fifthly, they have not yet succeeded in eliminating completely the element of subjectivity from measurement. There are three stages in examining: constructing a test, answering the test and evaluating the answers. The new technique has, no doubt, succeeded appreciably in eliminating the subjective element from the evaluation of answers but it has not been successful in doing so from the construction of tests. Pullias (1937) has shown in one of his investigations that when two or more examiners construct their own new type tests intending to cover precisely the same field of knowledge and ability and apply them to the same set of pupils, the correlation between the two sets of scores is not very high.

Sixthly, there is the problem of experts. It is very easy to set a question paper on the traditional lines but difficult to do so in the case of the new-type tests. Moreover, standardising a test is a long and laborious process and requires expert knowledge.

Seventhly, the tests are not diagnostic in the sense that they do not give us an inkling into or indicate the extent of a pupil's reasoning power. Diagnosis of a difficulty is very important because it is the first step in all remedial work. There are many things which a child may know and know them empirically but not rationally. It does not matter, from the

point of view of a diagnostician, whether the answer is right or not but what is important from his point of view is how the pupil has arrived at the result. In many cases it happens that a child reasons out three-fourths or even nine-tenths of a problem correctly but the "New Examiner" fails to appreciate this and refuses to give him any credit for this.

Finally, there is an inherent danger in these tests in regard to the amount of coaching that may be done by teachers. This is especially so in case of standardised tests because the contents of these tests are known to the teachers and it may be too much on their parts to resist the temptation of helping their pupils in this respect.

It is evident from the above discussion that the new-type tests provide us with an improved instrument of measurement but it would be wrong to suppose that they are the panacea for all the ills of measurement. It would be a retrograde step to do away with the essay-type test and resort to the new type techniques alone. Such a step, in our opinion, would be tantamount to throwing away the baby with the bath water. It is, therefore, imperative for us to adopt an eclectic approach and devise our tests in such a way as to derive the maximum benefit from both—the new and the old.

A happy combination of the new-type tests with the essay-type examinations is, therefore, the first essential to be achieved. This, however, is not the only reform to be introduced at the moment. There are certain other directions in which examination reform is not only desirable and feasible but absolutely essential. We now proceed to discuss these

points. These are such as can be implemented easily and, therefore, deserve serious consideration at the hands of all teachers, supervisors and administrators.

The first suggestion in this respect is that the rigour of the present system of examinations should be reduced to the minimum. They should be conducted and interpreted in such a way that both the teachers and the taught should take them as a device for self-correction and better growth rather than as a final verdict on their being good, bad or mediocre. The assessment or the mode of examination should not be damaging to the habits of work or to the development of character. For instance most of the students while away their time for a greater part of the year and work for the examinations only during the last three or four months. This is not only undesirable but highly harmful. Similarly the widely held belief, that he who fails in an examination is a duffer, should be exploded. A person failing in one kind of activity may be excelling in some other activity. The basic fact that everybody is good for something and that nobody is good for everything should not be forgotten.

Secondly, the emphasis on one all-important annual examination should disappear. The pronouncement on the ability and proficiency of a child should depend not so much on the result of the final examination but on the progress as shown in the school records. This end is being achieved in educationally advanced countries by the introduction of the cumulative record cards. These cards give a comprehensive, detailed, continuous and useful information about the pupil

and this information is not confined to one term, semester or year but is spread over the entire schooling of the pupil. In this way it goes a long way in depicting a picture of the learner's personality and is very helpful in understanding the pupil and discovering the traits of his character besides the standards of proficiency attained by him in different subjects and activities.

The Secondary Education Commission (1953) has strongly recommended the maintenance of such records for schools all over the country. A specimen of the cumulative record form as suggested by the commission is reproduced below for the guidance of teachers. But it should, under no circumstances, be regarded as the last word. It is only suggestive and teachers and administrators may make such changes in it as they think desirable.

Specimen Form of Cumulative Record

[Entries should be made at the end of each year by the teacher in consultation with the other teachers who come into contact with the pupil. The entries in the cumulative record should normally be the grade in each item on the five-point scale supplemented wherever necessary with verbal remarks.]

Name of Pupil.

Date of birth.

Name of Parent.

Occupation of Parent or Guardian.

Address of Parent or Guardian.

School History.

Name of Schools studied Year Reasons for Transfer.

Family History : Position of child in family.

Family Discipline.

Home Circumstances.

Pupil's Ambitions. Parent's desire regarding career.

A. Scholastic Attainments

19 19 19

Subjects. Grade Remarks Grade Remarks Grade Remarks

1. First Language
2. Second Language
3. English
4. Mathematics
5. Science
6. Social Studies
7. Bifurcated Course ()

B. Activities (Practical)

19 19 19

Subjects. Grade Remarks Grade Remarks Grade Remarks

I. Craft () :

- (a) Turnover
- (b) Craftsmanship
- (c) Application

Total Grading

19 19 19

Subjects. Grade Remarks Grade Remarks Grade Remarks

2. Social and Citizenship Activities :

- (a) Collections
- (b) Expression
- (c) Service

(d) Proficiency Batches

(e) Team Spirit

Total Grading

<i>Subjects.</i>	<i>Grade Remarks</i>	<i>Grade Remarks</i>	<i>Grade Remarks</i>
	19	19	19

3. Physical Education :

(a) Physical Efficiency

(b) Participation in Games, etc.

Total Grading

<i>Subjects.</i>	<i>Grade Remarks</i>	<i>Grade Remarks</i>	<i>Grade Remarks</i>
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4. Drawing and Painting :

(a) Technique

(b) Expression

(c) Originality

Total Grading

5. Music :

6. Dancing :

C. Health Report

	19	19	19	19
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Height

Weight

Chest Expanded

Normal

Contracted

Medical Officer's report

D. Personality Traits*

	19	19	19	19	19
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Initiative

Integrity

Persistence
 Leadership
 Self-confidence
 Emotional Control
 Social Attitude

**Note :—* It is desirable that wherever possible the entries for each item may be clarified with details as below :—

<i>e.g.</i>	Leadership Sports field	A
	Social Activities	A
	Intellectual	B
	Persistence Craft	A
	Mathematics	C
	Physical Activities	B

E. General Remarks

19 . 19 . 19 19 19

1. Position of responsibility held
2. Special Remarks
3. Signature of Classmaster
4. Signature of Headmaster

Such a record should be maintained by the class-teacher from year to year and should not only give a correct and complete picture of a pupil's all round progress at a particular stage of his education but this evaluation should be progressive from day to day, month to month, term to term and year to year.

It is certainly true that the introduction of such a system will add to the work of the teacher, but the advantages

accruing from it will far outweigh the extra labour of the teachers. A record of this type, however, should not be a mere collection of marks or a system of book-keeping but should have a diagnostic value. In this way it will affect the entire character of a teacher's work besides helping the pupil, his parents and others in determining his future course of study, or his future vocation.

Thirdly, the frequency of public examinations should decrease. In our opinion there should be only one public examination and it should come on the completion of the school course—may be high school or higher secondary school. Even in respect of class-work we should refrain from too many tests and assessments. If a teacher gives marks for every response that a pupil makes on every day and in every lesson, he will be guilty of making a fetish of it and the boon will thus become a bane.

Fourthly, the system of numerical marks current to-day should be scrapped. This system introduces too many subdivisions and they are not only time consuming and cumbersome but practically useless. No doubt, the system gives the semblance of a most accurate judgment, but however strong the acumen of the examiner may be, it is well-nigh impossible to distinguish between an award of 50 or 51 or even 52. The number of grades should be reduced and reduced drastically. The Secondary Education Commission (1953) has recommended a five-point scale for the purpose—A for excellent, B for good, C for fair and average, D for poor and E for very poor. D and E may be considered to indicate failures.

Fifthly, the pattern of internal examinations should also change. In such cases examinations should not be set occasions at the end of a term or a year. They should, on the other hand, be of the nature of small and informal tests coming more frequently but taking up little time. They should be regarded as an integral part of the class-room work and should be used more as a device of learning and teaching than as an instrument of measurement.

Sixthly, in case of external examinations every possible care should be exercised in regard to the appointment of paper setters and examiners. They should be such persons as have actually some experience of teaching the standards for which they are being appointed. Provision must also be made for a board of moderators to approve of the standards and make such changes in the questions as may be desirable. The moderators must also satisfy themselves regarding the language of the questions and see that they are free from ambiguity and appropriate in difficulty. In case of bigger examinations a meeting should also be arranged between the paper setters and examiners with a view to discussing the question papers and drawing up instructions for marking the scripts.

Seventhly, due consideration should be given to *viva voce* and practical tests at every stage. Their importance cannot be over-emphasised in the case of external examinations. Alertness of mind and power of expression can be judged much better by a practical examination than by a written test. But it is important to have proper conditions for such tests. Some examining bodies do away with this type of examination

because they cannot cope with large numbers. Numbers do present a formidable problem but it would be wrong to do away with this kind of test only because of the expenses involved or difficulties encountered in making arrangements for the purpose. It is the first duty of the authorities concerned to mete out justice to the examinees and this can hardly be done by ignoring *viva voce* and practical examinations.

Eighthly, the final certificate can also be made helpful in doing away with some of the evils of examinations. In the past it has been indicative only of one thing—the success in the final examination and the division or marks obtained. But this is not enough. It should be made more expressive of the internal assessments and should contain extracts from the cumulative record card. The very mention of these items in the final leaving card will remove the scare of examinations and enable pupils and teachers alike to see them in the proper perspective. It has been suggested in some quarters that such a certificate will not be reliable because standard will vary from institution to institution. We are conscious of the validity of this argument. But as things are it is impossible to attain complete uniformity of standards. But a desirable move would be to appoint an Assessment Board which should visit every school and test a random sample of pupils. This Board should, with the help of statistical devices, alter the awards of each centre so as to be comparable with other centres.

Finally, self-assessment has to be encouraged as much as possible. This end can be achieved very easily in case of

assignments and internal tests which should be turned into important educative experiences by discussing the tests and the responses of the pupils carefully.

In the above paragraphs we have made some suggestions with a view to reforming the prevailing system of examinations. All the points mentioned above and the reforms suggested boil down to one salient point and that is that both the teachers and the taught should take examinations as a help to self-correction and better growth rather than as a final verdict on their being good, bad or mediocre.

The twentieth century, moreover, has witnessed a widening of the meaning and scope of education. The schools of to-day concern themselves not only with the intellectual pursuits but also with the physical, social and emotional developments and adjustments of children. The concept of examinations, therefore, with its usual connotation of measuring educational and mental ability only has to be widened. This is why the terms appraisal and evaluation are getting wider currency and greater acceptance. These concepts are an effort at measuring the whole child by the use of tests and a wide variety of non-test techniques and devices.

Before closing this chapter, we would like to invite the attention of our readers to the acid test of appraisal. The primary purpose of education, as we have stressed time and again, is to draw out the innate qualities of an individual and develop them to the highest possible limit. That kind of appraisal, therefore, is good that helps in the achievement of this end. If it acts as a hindrance to it it should be scrapped boldly and with courage.

Chapter IX School-Community-Relationship

SCHOOLS, in one form or another, have been in existence from times immemorial. When we come to consider their functions we find that they have meant different things to different men in different times. From amongst the different concepts which have been most significant in different ages and stages of cultural development, there are two concepts which play important roles in the philosophy and practice of teachers even to-day and they may, in the absence of a better name, be called the formal and the progressive concepts.

Of these two concepts, the formal concept views the school as an agency of learning some basic subjects and acquiring some basic skills. These basic subjects and skills are commonly regarded by the formalists as the fundamentals of education. The job of the formalist teacher, therefore, is to divide the subject-matter into suitable units and then think of ways and means of putting those units across to pupils in such a manner as to be learnt by them as quickly and as effectively as possible. The subject-matter and the particular skills are fixed and pre-determined and the pupils, and in some cases even the teachers, have no right to alter them in any way whatever. The formalists, in other words, accept the ready-to-wear aspect of the curriculum and permit of no change, variation or alteration in it. Even in regard to method, the gradation and the organisation of the material are the sole purview of the teacher and the pupils have to behave as passive recipients of knowledge. Authority in

regard to preservation of law and order also vests in and rests with the teacher. Emphasis is laid on external control and obedience is extolled as the highest virtue.

The progressive concept, on the other hand, is opposed, more or less, to all that the formalists believe in. It has in fact, come as a reaction against external impositions and authority. It gives freedom to the child and makes his interests supreme. It also regards education as a learning activity and not as a teaching activity and makes the pupil an active partner in it. The job of the teacher is not to force some knowledge down the throats of children but to organise their experiences in such a manner as to lead to learning automatically. The teacher conceives of education as the development of desirable behaviour patterns and regards himself as an agent helping the pupils in that direction. His job, therefore, is to guide the growth of his pupils rather than merely driving the contents into their minds. The interests and needs of pupils are supreme to such a teacher and they are to be used as growing points towards further experiences.

To sum up, the formal aspect regards education as synonymous to the acquisition of knowledge and certain forms of skill. It regards a school as a mere "factory for literacy" and just as one goes to a fishmonger for fish and to an ironmonger for iron, similarly one goes to a school for knowledge. The progressive aspect, on the other hand, gives education a much extended meaning and attempts at doing things in response to certain needs of the pupils and aims at

developing healthy attitudes. In summing up the main differences we might safely affirm that in one case the teacher is subject-minded, in the other he is child-minded; in one case subject-matter is the end of education, whereas in the other it is just one among so many materials of education leading to a fulfilment of the needs of children. In short, a school run on progressive lines becomes a place where the child occupies the centre of the stage and all the activities carried on are not only meaningful to him but have to emanate from him and meet his needs and requirements.

The two aspects discussed above represent two different philosophies of education and give rise to different procedures. The swing of the pendulum in the recent past, however, has largely been from the formal aspect to the progressive one. It is a healthy swing but it should be remembered that the progressive view in its extreme form permitting completely unbridled freedom to the child in selecting his learning activities not only minimises the role of the teacher in guiding the growth of the child but there is a likelihood of its leading to valueless and sometimes harmful activities. It is, therefore, imperative for us to add another proviso to the functions of schools stated in the above paragraphs. The schools have not only to enable their pupils to acquire mastery over a conventional body of subject-matter, develop some fundamental skills of learning and be child-centred; but they have also to be related to the conditions and demands of the society in which they have originated and which they have to serve. This view implies that only such knowledge is worth

acquiring as meets the problems of modern life and enables the individual to play his role in the group in which he is placed. Education is thus conceived of as a process of making behaviour changes both in the individual and in the community to which he belongs and this end is to be achieved by developing suitable controls which may be social or personal. The schools, in other words, have not only to bring about behaviour changes in individuals but have to take a long range view and be responsible for bringing about behaviour changes in social groups. The school must, therefore, accept responsibility as an agency for social improvement and be instrumental in enabling those who go out of their portals to live better, fuller and more effective lives than those led by their predecessors. This end can be achieved only if the programme of the schools is directly related to and is inextricably linked up with the life of the community, its needs, its problems and its linkages.

The above considerations lead us to the most rudimentary but certainly the most important principle of schooling—from book-centred and child-centred schools we must pass on to life-centred schools. The implementation of this one basic fact in the educational system will revolutionize our philosophy and bring about radical changes in our methods. It has been said that emergencies often reveal needs that under ordinary circumstances would be omitted, ignored or neglected. The growing unemployment in this country, the decline in the community life, the drainage of wealth from the villages to cities and towns, the increasing depopulation of rural areas, the respect that white-collar and black-coated professions

command and the stigma that attaches to manual work are all pointers to one failing in our educational practice—our schools are cut off from life situations. According to the 1951 census about 81·7 percent of the population of India lives in villages, and about 70 percent lives on agriculture. But those who receive education in our schools and colleges, instead of going back to land and settling in their home communities, are driven away from it. They are drained away, so to say, by the schools and colleges and pumped off into towns and cities where they lose all contacts with the community life and community culture. Our institutions, it cannot be denied, have been largely instrumental in denuding our villages of the best talent and thus strangulating the community life therein.

This dwindling of the village community and its culture presents a great challenge to the leaders, administrators and educationists alike. The importance and significance of rural life in the destiny of a nation cannot be overemphasised. The University Education Commission (1949) has also commented on this aspect and has observed as follows:—

“In the course of world history, seldom has the greatness of a nation long survived the disintegration of its rural life. For untold ages man by nature has been a villager and has not long survived in any other environment. Almost every study of the subject which has been made in Europe and America has revealed that as a rule city families survive for only a few generations. Cities grow and thrive only as they are constantly replenished from the rural population. So long

as a nation's rural life is vigorous it possesses reserves of life and power. When for a long time cities draw the cream of life and culture from the villages, returning almost nothing, as has been the case in India during the last two centuries, the current village resources of culture and energy become depleted, and the strength of the nation is reduced."¹

It has been stated above that the latest trend in education is to make it life-centred and it is this reorientation which will make the nation vigorous and give it life and power not only to sustain itself but also to sustain others. This re-orientation can be brought about only if the schools give up their ivory-tower isolation and adopt a new role—the role of the community-school. This role implies the breaking up of the barriers between the school and the community, on the one hand, and the community and the school, on the other. It demands that there should be a regular bridge, rather bridges, provided for a continuous flow of traffic between the two agencies—the school and the community—each educating the other as well as learning from it. The school and the community, according to this point of view, must not be isolated institutions, separated and dis-severed from each other but they should be indivisible and indissoluble from each other. Each must, moreover, regard the other as an effective tool of learning and try its utmost to make it a better, richer and happier place to live in.

1. The Report of the University Education Commission, Ministry of Education, Government of India, 1949, p. 536.

The educationists, in most of the progressive countries, —are becoming increasingly aware of the community-school ideal and are orientating their institutions accordingly. It is, therefore, desirable at this stage to discuss this ideal in greater detail and bring out its salient features.

The adoption of the community-school ideal implies, in the first instance, that a school will take itself into the community, regard it as a laboratory, discover its resources, understand its culture, appreciate its problems and suggest solutions to these problems. It provides opportunities to the pupils to explore not only the physical setting but also the human setting. The physical setting includes questions as regards size, climate, topography, soil, minerals and other similar problems. The human setting implies an understanding of the people inhabiting the community. It discusses problems pertaining to population, health, education, occupations, and other considerations resulting in class and caste structures. These studies necessitate a thorough survey of the community and a complete utilisation of its resources for educative purposes.

The second implication of the community-school ideal is that a school, outside school hours, will be turned into a community centre. The term community centre is very common in the West but it is not so well known yet in this country. It may be defined as a place which provides facilities for the social, educational and recreational welfare of the community living around it.

The foremost use of such centres, therefore, is to inculcate in the minds of the members of a community an appreciation

for the leisure that they have and enable them to spend it in a wise, judicious and healthy manner. It has been said that the education of a person is visible in the manner in which he spends his leisure. If he just idles away his time in tall talk or in mere gossip or in visiting drinking dens or gambling houses, so much valuable time and energy, not only of the person but also of the community, are wasted. It becomes, therefore, the direct responsibility of the community to teach its members the ways and means of passing their leisure in recreative and fruitful pursuits and also provide facilities for the same either free or at a very nominal cost.

We have also to draw the attention of our readers to another serious matter—the colossal waste in our educational resources. It is a well-known fact that in our country the school buildings and their equipment are used for seven hours out of twenty-four hours and that also for only six and a half months out of twelve months. Calculating these averages further, it might be safely affirmed, that a school plant is used roughly for a total of 1500 working hours in a year. In other words we might say that a school building, its furniture, equipment and other services are used only for two months out of twelve months and lie idle for the remaining ten months. What a colossal national waste !

The adoption of the community-school ideal by the teachers, supervisors and administrators will go a long way in putting a stop to this enormous national waste. It will enable the schools to make a wider use of their existing facilities and ancillary services without much increase in the cost thereof. The

entire school plant including its Halls, Gymnasias, Libraries, Museum, Playgrounds, Swimming Pools, and other facilities will not remain a centre of school activities only but will be extended to the community at a very small cost. The school will thus become a centre of community activities and would add to the richness and variety of the life of the community in many ways.

When we make a closer examination of the community-school ideal, we find that its adoption is a crying need of our country. We live in a democracy where about 82 percent of the population can neither read nor write and, therefore, the most valuable treasures of human culture and civilisation are denied to them. The situation in this respect is not only distressing but disappointing. In the words of Professor K.G. Saiyidain, "If some one were to prepare a literacy map of the world and colour the illiterate areas of the earth black India will, to our shame, look like a dark continent. This is a state of things which makes me feel both ashamed and indignant—ashamed that a country, which prides itself on one of the oldest cultural traditions in the world, should have come to this pass, and indignant because we have been content to put up with this blot on our reputation for so long." The fact that we have chosen the path of democracy for the achievement of our ideal has added to the poignancy of the situation in this respect.

It is, therefore, absolutely necessary for us to strive every nerve to remove this stigma from our national character. Unless this is done, it will be futile to imagine and perhaps a

folly to contend that the masses of this beloved country of ours are capable of understanding the principles on which our freedom is based and validated. We in this country, need a new philosophy which does not emphasise our rights only but prompts and inspires us to fulfil the correlative duties thereof also. We in fact need what Lincoln called "a new birth of freedom" and this will come more from educating our masses than from anything else. Various schemes of education, with this aim in view, are being conceived and pushed forward with some vigour. It cannot, however, be denied that the effectiveness of these schemes will be increased manifold if the scope and the sphere of influence of the schools is extended and the community brought into the school. This will necessitate the employment of some special staff, no doubt, but the return in the form of effectiveness will be out of all proportions to the extra expenditure incurred thereon.

The acceptance of the community education ideal by our schools will make them centres of educational and cultural life of the entire community. It will also give a lie to the erroneous though widely held belief that education is something which is carried on within the four walls of a school-room with immature people sitting placidly in their seats and studying from their books or listening to their teachers. It will, on the other hand, propagate the philosophy that education is the outcome of practical experience, observation and personal judgment. It will also emphasise the fact that education is a life-long process, extending from the cradle to the grave, and the time

when one can say that one's education has been completed will never come in one's life time.

In order to work the community-school ideal in practice, it is not only desirable but absolutely essential to coordinate properly the activities of the school, on the one hand, and those of the community, on the other. It is wrong to imagine that the function of the community-school in respect of the community is nothing but to conduct evening programmes for adults and permit the use of the school plant to the community when a requisition is made for the purpose. The ideals of the community-school make it imperative for the organisers to bridge the gulf between the school and the community, provide a two-way traffic between them and demand a regular flow of activities, resources, and services from the one to the other. The leadership in regard to the organisation of the agency for the proper achievement of the ideal vests in and rests with the head of the institution but it would be useful for him, and helpful too, if a council or a committee is set up for the purpose. This council or committee should not be entirely of his own making. It may be planned by him but it should invariably have the active support of the members of his staff as well as that of the leaders of the community in different spheres. The size of this committee or council merits two considerations—it should be large enough to be representative of different interests, but it should not be so large as to preclude free discussions and hinder free expression of opinions. It is in the fitness of things that the head of the institution should be its chairman *ex officio* but it will work properly only if the

person at the helm of affairs is not only enthusiastic about it himself but also has the ability to arouse enthusiasm in others. The concept of this committee should grow rather than be thrust on the community and it is this committee which should not only decide upon the activities to be arranged, personnel to be exchanged, facilities to be extended and such other organisational matters but also establish the necessary coordination between the two wings of the community-school—the community and the school.

The nucleus of such a committee to start with will be the Parent-Teacher Association. The need of such Associations can hardly be denied and it is heartening to find that their number and influence are on the increase. Every school must have a union or association of this type and if it does not have one, it can be accused of not only neglecting educational opportunities but also losing a valuable means of community support. In some communities such associations are very active and take a keen interest in the welfare of the children and advancement of the school ideal. In such communities the community-school ideal will thrive but in communities where the Parent-Teacher Associations either do not exist or are not very active, the community-school ideal will not bear much fruit. The contacts between the home and the school must necessarily form the first step in the realisation of this ideal.

Apart from this the contacts with the home pay dividends in certain other forms also. Many hurdles are crossed as a matter of course in establishing proper relationships with pupils when teachers and parents know each other and are on

friendly terms. Moreover, meeting pupils in their home environment will enable the teacher to know them more intimately and discover a lot of information about their abilities, aptitudes, interests and other character traits. Teachers come to know, from first hand experience, the conditions and circumstances in which pupils live and work and they can modify their methods of approach accordingly. This kind of information, it should be understood, will be denied to teachers otherwise.

The mutual cooperation between parents and teachers is indeed very helpful and invaluable to both. It enables the parents to understand the work that the school is doing and also helps the teachers in understanding the needs of the community in general and those of the children in particular. The knowledge that the work of a teacher is being appreciated by the parents of the children in his charge gives him solace and inspires him towards better and greater efforts.

Securing the cooperation of parents should not be a difficult thing for teachers. There might be some parents who are indifferent to the welfare of their children but most of them have a desire to keep themselves in touch with the school. This desire on the part of parents in itself is enough to win their cooperation and harness them for the common good. Meeting them cordially when they happen to visit the school, solving the problems which they present, inviting them to school functions, arranging a special day for their visit, and introducing them to the methods which are being employed for the proper education of their children are some of the ways which will not only secure but also cement and

strengthen the ties of cooperation between the home and the school.

Relating the school to the home, securing the cooperation of parents, joining hands with leaders of other interests in the community, extending the scope of activities in the school, maintaining a first-aid post in the school, organising exhibitions and festivals and celebrating red-cross weeks, bringing pupils into close touch with the community and its problems, inviting experts from the community into the class-room and utilising community resources to the maximum are important steps in vitalizing education and making it life-centred. These measures are all right in so far as they go but they are not enough. The most important contribution in this direction will be made by undertaking some constructive programme of community welfare and social action. The school must select some problem for investigation and, with the joint efforts of the pupils and the community, do something practical to improve the living conditions in the community. The project may be pertaining to drainage or cleanliness, water-supply or control of flies and mosquitoes ; but its completion will go a long way in impressing upon the school children and the community folk alike that the best way to serve oneself is through social service. They will also realise the most fundamental fact that a community can be good only if its children and youth make it so. It is this orientation which will make the school a community-school in the real sense of the term—school of the community, organised by the community and for the community.

It would be preposterous on our part to suggest, even for a moment, that an ordinary type of school can be converted into a community-school overnight by some sort of dictation, order or instruction from above. Apart from other things, there are three directions in which changes are not only desirable but most essential. They are staff, library and furniture. In regard to staff some additions will be necessary. Moreover the teachers entrusted with the job, whether they are whole-timers or part-timers, will have to adopt a new attitude not only to their work but also towards those with whom they come in contact. They will not be dealing with children only but with adults also. They should, therefore, be adepts in the psychology of adults because problems of personality will not be rare. They should treat each one of them as their friend and avoid giving themselves patronising airs. They should be particularly careful not to hurt their feelings or affront their self-respect. In this respect it must be realised once for all that the treatment of teachers towards the members of the community will do more in determining the success or otherwise of the community-school than anything else.

The teachers of these institutions should also appreciate the fact that the management and organisation thereof is to be carried on in a perfectly democratic manner. There should be a permanent organisation to exercise overall control and act as a co-ordinating council for the various sub-committees elected from amongst the members themselves for managing different activities. This sort of organisation will enable the individuals to have immense opportunities of training in leadership and democracy. By learning first to manage their

own affairs, these men and women will best be fitted to play their roles better in the wider spheres of local and provincial, national and even international affairs.

Next comes the Library. The stuff usually found in a school library will not appeal to adults and in view of this some additional expenditure will be absolutely essential. In an enquiry conducted by the author it was discovered that the village peasants especially the illiterate ones were interested most in folk songs and folk tales whereas the adult literates especially those engaged in some profession were interested most in current affairs. Religion, stories and novels, health and hygiene, child psychology and bringing up of children came later in the intensity of their interests. Books for the adult section will, therefore, have to be selected keeping the above priorities in view. But the golden rule to keep in mind would be to entrust the job, like other jobs, to the members of the community themselves.

Finally, there is the question of furniture. The desks which figure in our Secondary Schools and *tat-pattis*, which as a rule, form the only article of furniture in Primary Schools should not be used at all. The furniture should be such as will be most comfortable and suitable for adults. Even in respect of arrangement it is suggested that the class-room atmosphere should be given up and the club arrangement should prevail. This change in the seating arrangement alone will go a long way in conquering the initial apathy, suspicion and the feeling of inferiority of the adults and stimulate the members of the

community to join in and profit by the facilities available in increasing numbers.

It has been stated in the previous pages that a worthwhile school-community-relationship can be established only when there is a two-way traffic between the school, on the one hand, and the community, on the other. In other words, it is not enough by itself to bring the community into the school, it is equally essential to take the school into the community. Successful efforts in this direction are valuable instruments in the fulfilment of the functions of education and it would, therefore, be useful here to give some concrete examples of the strides that some schools have made and the success that they have achieved in this sphere. It should, however, be remembered that the problems of adopting the correct approach and establishing good relationships between the two wings of education, school and community, do differ but not very greatly between one school and another, between one community and another or for that purpose even between one area and another.

The first example in this respect comes from a Church of England School in the North-East of England. It is an ordinary type of school—the enrolment being eighty and the number of staff including the Head Teacher being three. This school has established an ideal liaison between the two agencies of education and presents a good model for study. Instead of describing the achievements of the school in our own words it would, in our opinion, be better to quote verbatim from a Report of the Central Advisory Council for Education

(England). The Report¹ observes as follows :—

"The relations between the staff, the parents and the children are well developed and friendly. The Head Teacher, resident in the village for six years, though not in a school house, has firmly established himself in the social organisation of the village. He is organist, choirmaster and church warden, secretary and treasurer of the Parochial Church Council and a member of several other village committees. On occasions he plays the organ in the village chapel, plays the piano for local dances and socials, and gives lectures to the Women's Institute Choral Class and Folk Dancing Class. The Infants' Teacher, resident in the village but a native of a village some miles away, comes into contact with the adult population through her chapel activities, which include the organisation of a girls' club.

"There is no organised parents' association, but the Head Teacher feels that he has the very full support of the parents and the local community in general. Evidence of this may be seen in the existence of a Men's Committee which organises the Annual Sports, and in the Women's Tea Committee which takes charge of the catering for all school social affairs. The community organises and contributes to events relating to the well-being of the school.

"Adults use the school in a variety of ways, particularly in connection with the evening Institute, of which the Head Teacher is Organising Master. Classes in choral music, needle-work, dress making and folk dancing are held on two evenings

1. *School and Life*: Report of the Central Advisory Council for Education, England, H. M. S. O., 1947, Pp. 30, 31.

a week and are attended by about fifty members. These classes bring parents into very intimate contact with the school staff and undoubtedly foster interest in school affairs. The school is also used once a week by the local mixed Youth Club which has about forty members, so that it can claim to have close contact with childhood, youth and maturity.

"The provision of accommodation, instruction and other amenities by the school and staff for the local community has a social value to all the partners concerned, although the premises and furniture are not always suited to the needs of the adults, nor are they always respected by youth. The school also serves the community, larger society too, by participation in salvage and savings campaigns, and by collections and donations for charitable purposes. The provision of school meals and the opportunity to purchase vegetables from the school garden are not to be overlooked."

This is an example of what a small band of workers can achieve in a small rural community. Another example worth careful study and faithful emulation is that of the Village Colleges in Cambridgeshire. They are centres of rural culture and combine in themselves two things—a school and a social centre. During the course of the day a Village College works as a school but in the evening when the classes disperse, it assumes the role of a social centre and the entire social life of the surrounding villages is centred here. The building provides not only some lecture rooms but includes other facilities also e.g. a canteen, a recreation room, a library room, exhibition rooms and a large assembly hall.

The work of these centres has been described by Professor J. Farenc in the following words. He writes :—

"The culture centre is, therefore, first of all a kind of Inter-Community Centre where adults can eat, drink, dance, meet and enjoy themselves. The specialised teachers of the continuation classes hold classes in the evening for the village people of all ages : theoretical and practical lessons are held in the school's workshop for carpentry and odd jobs. In the large kitchen premises lessons are given in cooking, laundering, sewing and tailoring.

"Lessons are regularly given by trained agriculturists on subjects of interest to the farmers of the neighbourhood. Modern methods of cultivation, agricultural machinery, market gardening, horticulture, stenography, book-keeping and even a little French or German are also taught, if required by enrolled members of the centre. The establishment is, therefore, also a busy hive of industry where, in an atmosphere of beauty and comfort (the rooms for adults are admirably furnished, in the best modern taste), village people, men and women, young boys and girls are trained and instructed as easily as if they were amusing themselves."

The establishment of the Village Colleges is indeed unique in a sense and it brings to light the contribution that an institution can make to the life of a community when the necessary material facilities are properly planned and made available.

For our next example we turn to the Mill Towns around Greenville in the United States of America. These towns are

fourteen in number and, not long ago, they all presented a dismal look. The educational institutions were managed by the local factories and their number was not large. They provided education up to the fifth grade only, and even that, in view of the conditions prevailing, in a most perfunctory manner. Then one man L.P. Hollis came on the spot as School Superintendent of the consolidated Parker School District and with his arrival things began to change and change quickly. The crux of his educational theory was : "It is not enough to teach children ; you must also teach the parents."

With this aim in view, Hollis set about the difficult and onerous job of community education. In order to do this he converted his schools into centres of community life and succeeded in changing the very habits of the people. As a result of his efforts the schools were freed from the yoke of the mills and factories and became independent. The education imparted therein was not only upgraded, from the fifth grade to the High School, but the quality of instruction therein was also revolutionised. The old-fangled ideas of passive repetition and barren reproduction gave place to active learning based on pupil participation and socialised techniques.

The establishment of the proper liaison between the school and the community enabled him to organise a library on wheels which moved from door to door. It issued and collected books. There was a schoolmobile with a lady incharge of it who exhibited and explained the use of the modern and

most up-to-date electrical appliances which could be used in the home. A whole-time psychiatrist was also appointed and he was available for expert advice and guidance to parents on bringing up their children as normal human beings.

The members of the community did not lag behind in their own individual and collective contribution. They gave up their lethargic attitudes, idle habits and wasteful practices and converted their dreary and disagreeable houses into attractive and happy places to live in. They provided pleasant lawns in their houses and laid sidewalks and parks in public places—not only of their own free will but also with their own voluntary contributions. A maternity house was also started where senior high school girls went each morning to bathe babies, and help mothers besides studying health and hygiene, nutrition and physiology. With proper sanction, of course, they were even permitted to watch a delivery and this in itself imparted them knowledge of sex and reproduction in a most natural and wholesome atmosphere. A science-fair is also organised. It is a continuous affair and is an added attraction. When the children finish their school, the authorities help them in getting half-time jobs and continuing the study of their subjects of interest during the rest of the day.

The above description might lead some people to think that the expenditure incurred on the schools in the mill towns would be excessive and fanciful. But this impression or conclusion is absolutely against facts. It has been observed that the expenditure on education in these areas per capita is 54.05 dollars whereas in South Carolina as a whole

it comes to 67·21 dollars per capita. This low-cost education, we need hardly remind our readers, is not cheap in quality or shop-worn in results. It is excellent in quality and inestimable in producing responsible citizens and breathing a new spirit of initiative and resourcefulness into the whole community.

The Mill-Town Miracle, we must repeat with all the force at our command, is not a thing which is peculiar to Greenville or to Hollis. What has been achieved there can be repeated in any community and in any area, two basic ingredients essential for its success being the personality and devotion of the teacher and the willingness on the part of the parents to co-operate. If these requisites are forthcoming, and forthcoming in a reasonable measure, so much can be done with so little.

The above examples have been drawn from foreign lands but we must beware of drawing the conclusion that the entire problem is extraneous to our soil and alien to our philosophy. On the contrary, it is extremely suited to the genius of our people and has always occupied an important place in our scheme of things. The system of education in ancient India was based on the principle—education for the community. The *gurus*, it is true, lived and taught in places cut-off from the community but their *chelas* had to go to the village, town or city everyday to beg food, and it was the bounden duty of every *grahasti* to support them and thus support the cause of education. These daily visits to the nearby places brought the scholars in close touch with the community and its problems and when their course of instruction was finished, they found

it easy to fit themselves into the world in which they were thrown. The transition was easy, not difficult.

The same ideals are being upheld in the *gurukuls*. A gurukul which does not render service to the community, is not fulfilling its mission. The outstanding contribution of Rabindranath Tagore at Shantiniketan is another instance in point. In that place the school and the community coalesce into one and each identifies itself completely with the other. In course of time, it is true, the main burden of work in respect of community reconstruction was entrusted to Sriniketan, a separate institution, but this was done with a view to cope with the ever-increasing demands on the central institution itself instead of under-rating in any way whatever the importance or the valuable contribution of the planned programme.

Before concluding this chapter we would like to repeat that the development of a proper relationship between the school and the community is the most crying need of our times. Schools must begin to see beyond the world of books and should link themselves to life—real life as it is lived in the community. They, must, therefore, be organised as a community and function as a smaller community within a larger community. The relationship between the two must be healthy and helpful, and the contacts constant and continuous. The barriers which at present exist between the two and isolate one from the other must be knocked down and knocked down completely.

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